

CITY OF LEEDS

REPORT

ON THE

HEALTH

OF THE CITY

FOR THE YEAR 1960

BY

Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.  
*Medical Officer of Health and Principal School Medical Officer.*



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## HEALTH COMMITTEE

LORD MAYOR (Alderman Mrs. Lillian Hammond, J.P.)

*Chairman* : Alderman WINIFRED SHUTT

Alderman ELIZABETH M. LISTER, M.B.E.	Councillor W. M. JONES (Deputy Chairman)
" Z. P. FERNANDEZ, B.A., M.D., D.P.H.	" F. STUBLEY
" F. WALKER, O.B.E. (to May, 1960)	" G. I. ADDLESTONE
" F. NAYLOR	" Mrs. E. J. WHITEHEAD (from May to September, 1960)
" J. HILEY, M.P. (to May, 1960)	" A. CHADWICK (from May, 1960).
Councillor A. M. VICKERS (from May, 1960)	" W. MERRITT, S.R.N., R.M.N.
" VYVYAN M. CARDNO.	" G. MURRAY
" L. WALSH, M.B., Ch.B.	" Mrs. LUCY LYONS (to May, 1960)
" J. H. FARRELL (from May to September, 1960)	" Miss ENID M. COWARD (to May, 1960).
" H. DRAKE, L.D.S., R.C.S., Barrister-at- Law	" D. W. BRADLEY, LL.B., L.A.M.T.P.I.
	" ST. JOHN BINNS
	" S.A. CODD (from October, 1960)

### EX-OFFICIO MEMBERS :—

Representatives of Leeds Medical Committee (National Health Service)  
invited to attend in an advisory capacity :—

Dr. J. H. E. MOORE, Deputy :—Dr. W. ADAMS

## SUB-COMMITTEES

### SUB-HEALTH (MATERNITY AND CHILD WELFARE) COMMITTEE.

*Chairman* : Alderman WINIFRED SHUTT

Alderman ELIZABETH M. LISTER, M.B.E.	Councillor J. H. FARRELL (from May to September, 1960)
" Z. P. FERNANDEZ, B.A., M.D., D.P.H.	" W. MERRITT, S.R.N., R.M.N.
" F. NAYLOR (from December, 1960).	" W. M. JONES.
Councillor Mrs. LUCY LYONS (to May, 1960).	" Mrs. E. J. WHITEHEAD (from May to Sep- tember, 1960).
" VYVYAN M. CARDNO	" H. DRAKE, L.D.S., R.C.S., Barrister-at-Law (to May, 1960)
" L. WALSH, M.B., Ch.B.	" Miss ENID M. COWARD (to May, 1960)
" D. W. BRADLEY, LL.B., L.A.M.T.P.I.	" S. A. CODD (from October, 1960)
" A. CHADWICK (from May, 1960)	

### CO-OPTED MEMBERS :—

Mrs. H. BEEVERS      Mrs. E. E. BIBBY



## SUB-HEALTH (MENTAL HEALTH SERVICES) COMMITTEE.

*Chairman :* Alderman Z. P. FERNANDEZ, B.A., M.D., D.P.H.Alderman ELIZABETH M. LISTER,  
M.B.E.

,, WINIFRED SHUTT

,, F. WALKER, O.B.E. (to  
May, 1960),, F. NAYLOR (to May,  
1960, and from Dec-  
ember, 1960)

Councillor L. WALSH, M.B., Ch.B.,

,, D. W. BRADLEY, LL.B.,  
L.A.M.T.P.I. (from  
May, 1960).,, H. DRAKE, L.D.S.,  
R.C.S., Barrister-at-  
Law.Councillor Mrs. E. J. WHITEHEAD  
(from May to Sept-  
ember, 1960),, A. CHADWICK (from May,  
1960)

,, F. STUBLEY

,, G. MURRAY (from May,  
1960).,, W. MERRITT, S.R.N.,  
R.M.N.,, Mrs. LUCY LYONS (to  
May, 1960),, ENID M. COWARD (to  
May, 1960)

## CO-OPTED MEMBERS :—

Mrs. A. R. INCE, M.B.E.

Mrs. S. MURRAY

Mrs. N. BILLINGTON

## SUB-HEALTH (SANITATION, FOOD AND DRUGS) COMMITTEE

*Chairman :* Councillor W. M. JONES

Alderman WINIFRED SHUTT

,, F. NAYLOR

,, J. HILEY, M.P. (to May,  
1960)

Councillor VYVYAN M. CARDNO

,, H. DRAKE, L.D.S., R.C.S.,  
Barrister-at-Law,, J. H. FARRELL (from  
May to September,  
1960).

Councillor G. I. ADDLESTONE

,, A. M. VICKERS (from  
May, 1960),, S. A. CODD (from Oct-  
ober, 1960),, W. MERRITT, S.R.N.,  
R.M.N.,, D. W. BRADLEY, LL.B.,  
L.A.M.T.P.I.

,, G. MURRAY

,, F. STUBLEY (to May,  
1960).

,, ST. JOHN BINNS.

## PUBLIC HEALTH STAFF

Medical Officer of Health and Principal School Medical Officer	Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Deputy Medical Officer of Health and Deputy School Medical Officer	G. E. WELCH, M.B., B.S., D.P.H.

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### *Medical Staff and Nursing Staff*

Chief Assistant School Medical Officer	J. G. JAMIESON, M.A., B.M., B.Ch., D.C.H.
Medical Officer for Mental Health Services	J. M. McALPIN, M.B., Ch.B.
Assistant Medical Officer of Health in charge of Immunisation	A. SHAW, M.B., B.S.
Honorary Assistant Medical Officer of Health. (By arrangement with the University of Leeds)	A. N. MACPHAIL, M.C., M.D., Ch.B., D.P.H., Senior Lecturer in Public Health, University of Leeds.
Assistant Medical Officer of Health for Maternity and Child Welfare	CATHERINE MARGARET GRAY, M.B., Ch.B., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S. ISOBEL B. ALEXANDER, M.B., Ch.B. EUGENIE C. ILLINGWORTH, B.Sc., M.D., M.B., Ch.B., M.R.C.S., L.R.C.P., D.R.C.O.G., D.C.H. JESSIE I. ROSIE, M.B., Ch.B., D.P.H. MARGARET C. PULLAN, M.B., Ch.B. (to 31st March, 1960). MOIRA C. ROBERTSON, M.A., B.M., B.Ch. (from 3rd August, 1960). BARBARA M. BROOKE, M.B., Ch.B. FRANCES E. SMITH, M.B., Ch.B., D.P.H. JAMESINA FELGATE, M.B., Ch.B. ETHEL MAY WRIGHT, M.B., Ch.B., D.C.H.
Superintendent Health Visitor and School Nurse	JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)
Health Visitor Tutor in Sole Charge	FLORENCE M. MAWSON, S.R.N., S.C.M., D.N., D.P.A.
Supervisor of Midwives .. ..	DOROTHY HUMPHREYS, S.R.N., S.C.M.

Superintendent, Part II Midwifery Training School	PAMELA BIRD, S.R.N., S.C.M., M.T.D.
Superintendent Nurse, Home Nursing Service	EDITH G. MEADOWS, S.R.N., S.C.M. (to 20th November, 1960) KATHLEEN E. WHALLEY, S.R.N., S.C.M. (from 1st December, 1960)
Superintendent Nurse, Home Nursing Service	ELSIE BOULTON, S.R.N., S.C.M., Q.N.

*Chief Public Health Inspector and Deputy*

Chief Public Health Inspector	.. J. GOODFELLOW, F.R.S.H., M.I.P.H.E.
Deputy Chief Public Health Inspector	J. H. WYATT, M.A.P.H.I.

*City Analyst and Deputy*

City Analyst	.. .. R. A. DALLEY, F.R.I.C.
Deputy City Analyst	.. .. L. A. PERKIN, B.Sc., F.R.I.C.

*Administrative Staff*

Chief Administrative Assistant	.. A. BATLEY
Executive Officer, Mental Health Services	J. SQUIRE HOYLE, M.B.E. (to 31st January, 1960)
Accountant	.. .. H. A. CORLETT, F.C.A.
Assistant Administrative Officer	.. W. WILSON, A.C.I.S.
Principal Clerks:—	
Statistics	.. .. E. RENSHAW
General Sanitation	.. .. J. R. MOIR
Infectious Diseases	.. .. J. K. BEEVERS
Food and Drugs	.. .. S. TITTERINGTON (to 25th July, 1960)
Finance	.. .. J. PEACOCK
Disinfestation Officer	.. .. C. W. LAMB, M.R.S.H., F.R.E.S.
Ambulance Officer	.. .. J. H. DAYKIN
Home Help Organiser	.. .. Mrs. DOROTHY W. ALFORD

*Consultants to the Health Committee*

Consultant Adviser in Tuberculosis	.. G. F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P., M.R.C.S.
Consultant Adviser, Infectious Diseases	E. C. BENN, M.B., Ch.B., D.P.H.
Consultant in Child Health	.. .. Professor W. S. CRAIG, B.Sc., M.D., F.R.C.P.E., F.R.S.E., M.R.C.P.
Consultant Psychiatrists	.. .. Professor G. R. HARGREAVES, O.B.E., M.R.C.S., L.R.C.P. A. H. WILSON, M.B., Ch.B., D.P.M.
Consultant Adviser in Venereal Diseases	.. .. J. B. BITTNER, M.B., Ch.B. (to 18th February, 1960) R. D. CATTERALL, M.R.C.P. (from February, 1960)

## PUBLIC HEALTH DEPARTMENT

## STAFF

<i>Class of Employees</i>	<i>No. employed at 31/12/60</i>
Public Health Inspectors .. .. .	52
Female Public Health Inspector .. .. .	1
Student Probationer Public Health Inspectors .. .. .	12
Condemned Meat Room Attendant .. .. .	1
Assistant Analysts .. .. .	3
Health Visitors .. .. .	59
Student Health Visitors .. .. .	9
Midwives (including part-time) .. .. .	50
Dispensers (including part-time) .. .. .	14
Physiotherapists (including part-time) .. .. .	4
Immunisation Nurses (including part-time) .. .. .	2
Chiropodists (including part-time) .. .. .	4
Social Workers .. .. .	4
Day Nurseries .. .. .	122
District Nurses (including part-time) .. .. .	67
B.C.G. Nurse .. .. .	1
Infectious Diseases Visitors .. .. .	2
Clerical Staff .. .. .	97
Welfare Foods .. .. .	6
The Hollies Preventorium .. .. .	14
Red Court Hostel (Midwifery Training) .. .. .	26
Convalescent Home, Southport .. .. .	5
Mental Health Services .. .. .	105
Central Ambulance Station Staff .. .. .	132
General Disinfection and Disinfestation .. .. .	24
Personal Disinfection and Disinfestation .. .. .	6
Flushing Staff .. .. .	10
Public Convenience Lighting .. .. .	1
Mortuary Service .. .. .	7
Rodent Operatives .. .. .	6
Lavatory Attendants .. .. .	28
Lavatory Cleaner .. .. .	1
Caretakers and Cleaners .. .. .	38
Home Helps (including part-time) .. .. .	286

# City of Leeds

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PUBLIC HEALTH DEPARTMENT,

25, EAST PARADE,

LEEDS, I.

Tel. No. Leeds 3-0661

September, 1961

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To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

I present herewith the Annual Report of the Medical Officer of Health of the City of Leeds for the year 1960.

The Registrar General estimated the population of the city at mid-year to be 514,760 as against 513,300 in 1959. Leeds is one of the few major cities in Great Britain in which the population is still increasing.

**Vital  
Statistics**

During the year the number of births registered was 8,789 as compared with 8,353 in the previous year. The birth-rate for 1960 was 17.1 as compared with 16.3 in 1959 and an average of 16.0 for the five years 1955-1959. The 1960 birth-rate is the highest recorded since the war years.

Deaths of infants under one year of age totalled 199 as against 213 in 1959. The Infant Mortality Rate for the year was 23. This is the lowest infant mortality rate yet recorded in Leeds and compares with 25 in 1959 and an average of 26 during the previous five years. Deaths of infants under one month old were 131 compared with 149 in the previous year; this gives a neo-natal death-rate of 14.9—the lowest to be recorded in Leeds. The peri-natal mortality at 30 is also a low record and compares with an average of 37 in the five years 1955-1959. Stillbirths also fell to 163 and the stillbirth rate to 18.2; corresponding figures for the previous year were 170 and 19.9.

There were 2 maternal deaths and the maternal mortality rate was therefore 0·22 per 1,000 total births. The general death-rate for the city was 11·2—yet another new record; the rate in 1959 was 11·9.

The death-rates for the principal cause of death were as follows, the figures in brackets being the rates for 1959:—

Cancer (all sites)	..	..	..	..	2·05	(2·29)
Cancer (lung and bronchus)	..	..	..	..	0·52	(0·56)
Coronary disease	..	..	..	..	2·38	(2·25)
Other heart disease	..	..	..	..	1·33	(1·34)
Vascular lesions of the central nervous system	..	..	..	..	1·49	(1·56)
Bronchitis	..	..	..	..	0·77	(0·97)
Pneumonia	..	..	..	..	0·71	(0·90)

#### **Infectious Disease**

It will be recalled that in each of the two previous years there had been one case of diphtheria. We were fortunate that in neither instance was there any spread of the disease in contrast to several other areas of the country where small outbreaks have occurred in recent years. This year we had no case of diphtheria, but once again the need to continue diphtheria immunisation must be stressed.

The year was a very favourable one for poliomyelitis, only one case having been notified. It will be recalled that in 1959 there had been 11 cases—a small number in comparison with the figures for preceding years. There can be little doubt that the very favourable figures must be largely attributed to the large scale polio vaccination programme of the previous years.

The Public Health (Infectious Diseases) Amendment Regulations, 1960, which came into force towards the end of the year, make anthrax a notifiable disease under the Public Health Acts in the same way as other infectious diseases. The new Regulations do not affect the duty of medical practitioners to notify cases of anthrax contracted in a factory to the Chief Inspector of Factories. One of the reasons for making anthrax notifiable under the Public Health Acts is to enable the Medical Officer of Health to investigate the source of infection and take any necessary action in cases occurring outside the scope of the Factories Acts where previously no-one had this responsibility.



Once again there was a significant increase in gonorrhoea in both males and females. In Leeds as in other parts of the country increasing numbers of teenagers infected gives rise to concern. It is clear that the immigrant population contributes a disproportionately large quota of cases.

**Venereal  
Disease**

The number of patients receiving two inoculations of polio vaccine during the year totalled 18,233 i.e. considerably fewer than in each of the previous two years. Just over half of the pre-school children have completed polio immunisation. Those of school age are a very well immunised group—almost 8 out of 10 having had polio immunisation, but the teenagers and young adults have responded very poorly to the offers of immunisation.

**Vaccination  
and  
Immunisa-  
tion**

There was again a sharp increase in the number of patients carried and in the mileage run. The Health Committee gave urgent consideration to the difficulties arising from the new arrangements for hospital admission of acute cases particularly during the winter months. To meet the situation they reviewed the organisation of the Ambulance Service and increased the establishment of vehicles and staff. The establishment of a bed bureau at St. James's Hospital was a considerable help.

**Ambulance  
Service**

The Mental Health Act, 1959, was implemented in stages during the year, the whole Act coming into force in November, 1960. The year was, therefore, a busy one for the Mental Health Sub-Committee and for its officers. Some time ago the Health Committee decided to convert the Armley Grange Training Centre into a hostel for subnormal women and girls and to provide training centre accommodation in a new purpose-built annexe to the hostel. The first stage of this work, that is to say, the new training centre, was completed on 1st October.

**Mental  
Health**

Rutland Lodge Hostel, which is the first of the Health Committee's Mental Health Hostels, was opened by Alderman Dr. Z. P. Fernandez, Chairman of the Mental Health Sub-Committee, on 31st October. This is a stone-built house which previously accommodated a male training centre for which new premises have been provided in the adjoining grounds. Rutland Lodge provides accommodation for 36 post-psychotic male patients who no longer require psychiatric treatment and are fit to return to community life but who have

no home to return to. It is much too soon to attempt to assess the value of the hostel but the demand for places has so far been small and the hostel is not yet filled.

### **Chiropody**

On 8th February, 1960, the Health Committee started to operate a Chiropody Service for patients referred by their general practitioner. In accordance with the advice of the Minister, the Service was initially restricted to three priority groups—old people, the handicapped and expectant mothers. The Service started with one full-time chiropodist and by the end of the year two full-time and two part-time chiropodists were providing 30 treatment sessions per week. It is clear that this Service meets a considerable demand and it is still expanding.

### **Home Nursing**

In May the Minister of Health approved the City Council's arrangements for the training of District Nurses for the National Certificate and the first course commenced in September with 10 students who took their examination in January, 1961. A further important extension to the District Nursing Service is the provision of a free laundry service for incontinent patients nursed at home. This has entailed the purchase of a stock of draw sheets and a special vehicle for collection and delivery. By arrangement with the Welfare Services Committee the laundering is carried out at South Lodge Laundry. At the time that the Health Committee instituted this service it was thought that there were perhaps 40 incontinent patients being nursed at home in the city. It is possible that this may be an underestimate since it is known that patients are often admitted to hospitals because of incontinence; some at least of these can be nursed at home in the future with the aid of the Incontinent Laundry Service.

### **Staff**

Mr. J. Squire Hoyle, Executive Officer of the Mental Health Section, retired on 1st February, 1960. Mr. Hoyle had completed 45 years service with the Local Authority, having joined the Department in August, 1914, as a junior clerk. During the first world war he saw service with the British Military Attaché in Washington, U.S.A., from 1916 to 1919. His appointment as Executive Officer to the Mental Health Committee dates from 1939. During his term of office Mr. Hoyle was responsible for the building-up of the city's Mental Health Service which is a monument to his energy, foresight and planning ability. He was joint author of the "Mental Health



Officers' Guide" which for many years was a *vade mecum* and guide through the maze of legislation in the mental health field which preceded the Mental Health Act. Mr. Hoyle's reputation extended far beyond Leeds and the value of his work nationally was recognised by the award of the M.B.E. in 1958. Though now officially retired Mr. Hoyle is still active in the field of mental health.

Miss E. C. Meadows, Superintendent of the District Nursing Service, retired on 20th November, having held office since June, 1948. Her appointment coincided with the coming-into-force of the National Health Service Act and to her fell the responsibility of re-organising the Service in accordance with the Health Committee's policy. Thanks are due to her for the efficient manner in which she carried through the transition period without interruption to the high standards of the Service.

I am glad to have this opportunity to offer my sincere thanks to the officers of the many Departments of the Corporation who have worked in close co-operation with the Health Department. Not all can be mentioned here but I owe a particular debt to the Town Clerk, City Treasurer, Chief Education Officer, City Architect, City Engineer, Director of Housing, Director of Works, Welfare Services Officer and the Children's Officer.

**Acknowledgements**

I wish to offer my sincere thanks and those of my staff to the Chairman, Deputy Chairman and Members of the Health Committee for their support and unfailing courtesy during the year.

I am,

Ladies and Gentlemen,

Your obedient servant,

D. B. BRADSHAW.

## SUMMARY OF VITAL STATISTICS

1960

LATITUDE 53° 48' North. LONGITUDE 1° 32' West.

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY .. .. .	40,613.5 Acres
HOME POPULATION (Registrar General's Estimate) ..	514,760
ESTIMATED NUMBER OF HOUSES .. .. .	173,810
RATEABLE VALUE .. .. .	£7,325,101
SUM REPRESENTED BY A PENNY RATE .. ..	£29,385

	Average	
	1960.	1950-59
BIRTH RATE (births per 1,000 living) .. .. .	17.1	15.8
DEATH RATE (deaths per 1,000 living) .. .. .	11.2	11.9
NATURAL INCREASE OF POPULATION .. .. .	2,998	1,979
(Excess of births over deaths in the year)		
INFANT MORTALITY RATE .. .. .	23	28
(Deaths under 1 year per 1,000 births)		
DEATH RATE from Pneumonia and Bronchitis ..	1.48	1.24
"    "    Cancer .. .. .	2.05	2.07
"    "    Diarrhoea and Enteritis (under 2 years)		
per 1,000 births .. .. .	0.57	0.98

	Cases	Case- rate	Deaths	Death rate
SCARLET FEVER .. .. .	415	0.81	..	..
DIPHTHERIA .. .. .	..	..	..	..
POLIOMYELITIS .. .. .	1	0.00	..	..
MEASLES .. .. .	2,649	5.15	..	..
WHOOPIING COUGH .. .. .	898	1.74	..	..
RESPIRATORY TUBERCULOSIS.. .. .	360	0.70	37	0.07
OTHER FORMS OF TUBERCULOSIS .. .. .	37	0.07	4	0.01

## VITAL STATISTICS

## RELATING TO MOTHERS AND INFANTS

(in accordance with Ministry of Health Circular 1/60)

	1960	1959	Average 1955-59
LIVE BIRTHS—			
Number .. .. .	8,789	8,353	8,165
Rate per 1,000 population .. ..	17·1	16·3	16·0
ILLEGITIMATE LIVE BIRTHS PER CENT. OF TOTAL LIVE BIRTHS ..	6·9	6·5	6·3
STILL BIRTHS—			
Number .. .. .	163	170	181
Rate per 1,000 total births (live and still) ..	18·2	19·9	21·6
TOTAL BIRTHS (live and still) .. ..	8,952	8,523	8,345
INFANT MORTALITY—			
Number of deaths under 1 year of age ..	199	213	210
Infant mortality rate per 1,000 live births	22·6	25·4	25·7
Legitimate infant mortality rate .. ..	22·0	24·8	25·1
Illegitimate „ „ „ .. ..	31·3	35·0	34·6
NEO-NATAL MORTALITY RATE			
(First four weeks) per 1,000 live births	14·9	17·8	18·1
EARLY NEO-NATAL MORTALITY RATE (Deaths under 1 week per 1,000 live births)	12·3	15·6	15·6
PERI-NATAL MORTALITY RATE (Stillbirths and deaths under 1 week com- bined per 1,000 <u>total</u> births) .. ..	30·3	35·2	36·9
MATERNAL MORTALITY—			
Number of maternal deaths (including abortion) .. .. .	2	4	5
Maternal mortality rate per 1,000 <u>total</u> births .. .. .	0·22	0·47	0·55



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**Natural and Social Conditions**  
**Vital Statistics**

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## NATURAL AND SOCIAL CONDITIONS

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**Area.**—The area of the city is 40,613·5 acres.

**Population.**—The Registrar General's estimate of the home population of the city at mid-1960 was 514,760.

**Dwelling-houses.**—The total number of dwelling-houses in the city at December, 1960, was 173,810.

**Rateable Value.**—The rateable value of the city at 1st April, 1961, was £7,325,101 and the estimated sum represented by a penny rate was £29,385. The corresponding figures at 1st April, 1960, were £7,122,091 and £28,530.

**Principal Industries.**—Engineering, wholesale clothing, woollen and worsted manufacture, and printing continue to be the city's principal industries. Approximate numbers of persons employed in these industries are as follows:— engineering (including metal manufacture, vehicle manufacture, metal goods and precision instruments) 50,000, wholesale clothing 43,000, woollen and worsted manufacture 13,000 and printing 10,000. Approximately 37,000 persons are employed in distributive trades. These figures are not strictly related to the population of the city as, of course, they include persons not resident in the city.

The average level of unemployment during the year was 1·0 per cent.

**Meteorology.**—The number of hours of bright sunshine recorded during the year was 1,137·47. The sunniest month was June with a daily average of 7·67 hours and the month with the least sunshine was January with a daily average of 0·34 hours. The sunniest days of the year were May 24th, June 4th and June 26th, each with 12·00 hours and the daily average for the whole year was 3·12 hours.

The total rainfall for the year was 35·61 inches. The month with the least rain was April with a total of 1·07 inches; the month with the most rain was November with 5·05 inches. Taking the four quarters of the year, the rainfall in the first quarter was 8·92 inches; in the second 3·25; in the third 11·24 and in the fourth 12·20 inches.

The month with the highest average temperature was June with 62·61°F and the lowest February with 39·46°F. The average temperature for the whole year was 50·84°F.

## VITAL STATISTICS

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### BIRTHS

The births registered in the city during the year numbered 9,483 comprising 4,810 males and 4,673 females. Of these, 468 males and 417 females born to parents not residing in Leeds were transferred to the areas in which the home addresses were situated, whilst 106 males and 85 females, born outside the city to Leeds parents, were transferred in, making a nett total of 8,789 births, comprising 4,448 males and 4,341 females.

The birth-rate was 17·1 per thousand of the home population, as compared with 16·3 for the previous year and an average of 16·0 for the previous five years. The birth-rate for the city was the same as that for England and Wales which was provisionally 17·1 per thousand of the population.

The birth-rate as adjusted by the Area Comparability Factor (Births) is given in the table on page 5.

**Excess of Births over Deaths.**—The excess of births over deaths or the “natural increase of population” was 2,998 as compared with 2,233 for the previous year and an average of 1,979 for the previous ten years.

**Illegitimate Births.**—Of the 8,789 (nett) births registered, 608 or 6·9 per cent. were illegitimate as compared with 542 or 6·5 per cent. for the previous year and an average of 515 or 6·3 per cent. for the previous five years.

**Stillbirths.**—The nett number of stillbirths registered during the year was 163, comprising 80 males and 83 females. The rate per thousand of the population was 0·32 as compared with 0·33 for the previous year. Expressed as a percentage of the total births, the rate was 1·8 as compared with 2·0 for the previous year. Of the 163 (nett) stillbirths registered, 11 or 6·8 per cent. were illegitimate. The ratio of registered 'still' to registered 'live' births was 1 to 54 as compared with 1 to 49 for the previous year.

## DEATHS

The gross number of deaths registered in the city was 6,205, comprising 3,268 males and 2,937 females, giving a gross death-rate of 12·1 as compared with 12·6 for the previous year and an average of 12·4 for the previous five years. The inward transferable deaths numbered 449 (220 males and 229 females) and outward transferable deaths 863 (479 males and 384 females) which, after adjustment, leaves a nett total of 5,791 deaths debitable to the city, made up of 3,009 males and 2,782 females.

The corresponding death-rate was 11·2 as compared with 11·9 for the previous year and an average of 11·5 for the previous five years. The provisional death-rate for England and Wales was 11·5.

**Area Comparability Factor.**—The Registrar General supplies an Area Comparability Factor (A.C.F.) and this, when multiplied by the crude death-rate, gives an adjusted death-rate which is comparable with a similarly adjusted death-rate for any other area. An adjusted death-rate makes allowance for any difference in the population structure of the area, by sex and age, from that of England and Wales as a whole. An A.C.F. is also supplied for the adjustment of the crude birth-rate.



The A.C.F. (Deaths) for Leeds was 1·13 and this, when applied to the crude death-rate of 11·2, gave an adjusted death-rate of 12·7.

The following table gives the crude and adjusted rates of London Administrative County and the twelve principal cities of England and Wales.

	Population	Birth-rate		Death-rate		Death-rate from		Infant Mortality Rate
		Crude	Adjusted	Crude	Adjusted	Resp. Tub.	Other Tub.	
London Admin. County ..	3,194,480	17·8	16·0	11·4	11·2	0·07	0·01	22
Birmingham .. ..	1,093,160	19·0	18·1	11·0	12·7	0·07	0·01	23
Liverpool .. ..	754,670	21·2	19·7	11·8	14·4	0·11	0·00	28
Manchester .. ..	665,590	18·9	18·2	12·4	14·5	0·12	0·00	29
<b>Leeds .. ..</b>	<b>514,760</b>	<b>17·1</b>	<b>16·8</b>	<b>11·2</b>	<b>12·7</b>	<b>0·07</b>	<b>0·01</b>	<b>23</b>
Sheffield .. ..	499,610	15·7	15·8	11·6	12·8	0·61	0·06	20
Bristol .. ..	433,750	15·9	15·9	12·1	11·9	0·06	0·01	20
Nottingham .. ..	313,760	18·3	17·5	11·0	12·4	0·08	0·01	23
Hull .. ..	302,400	19·1	18·4	10·6	12·9	0·11	0·01	23
Bradford .. ..	289,860	18·8	18·8	12·9	12·8	0·07	0·00	28
Leicester .. ..	273,370	16·6	16·8	12·6	12·6	0·08	..	24
Newcastle-upon-Tyne ..	268,970	18·7	18·1	12·7	14·2	0·09	0·02	27
Stoke-on-Trent .. ..	270,200	15·5	14·6	10·9	14·1	0·12	0·01	25

**Causes of Death.**—The principal causes of death during 1960 are given below (International List numbers in brackets).

Coronary disease (420) .. ..	1,223
Malignant and lymphatic neoplasms (140-205) ..	1,053
Vascular lesions of central nervous system (330-334) ..	769
Heart disease (410-416, 421-443) .. ..	683
Bronchitis (500-502) .. ..	394
Pneumonia (490-493, 763) .. ..	367
Other circulatory diseases (444-468) .. ..	245

The above group of diseases accounted for 4,734 or 81·7 per cent. of the total deaths as compared with 5,019 or 82·0 per cent. last year.

The table on page 9 sets out the causes of death in accordance with the International Statistical Classification of Diseases, Injuries and Causes of Death.

**Deaths in Age Groups.**—The table of page 13 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups 1-1, 1-2 and 2-5 was 236 or 4.1 per cent. of the total deaths, as compared with 250 or 4.1 per cent. in the previous year and an average of 239 or 4.1 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 531 or 9.2 per cent. as compared with 553 or 9.0 per cent. in the previous year. In the remaining age groups over 45 years the deaths numbered 5,260 or 90.8 per cent. as compared with 5,567 or 91.0 per cent. in the previous year.

**Cremations.**—Out of a total of 5,791 Leeds deaths during the year, the number of bodies disposed of by cremation was 2,771 or 47.9 per cent. as compared with 2,858 or 46.7 per cent. in 1959. Of this number, 2,132 were cremated at Lawnswood and the remainder, 639 at Cottingham. The total number of cremations represents a decrease of 87 on the figure for the previous year and an increase of 189 on the average number of cremations for the previous five years.

**Public Mortuary.**—The number of bodies received into the public mortuary during 1960 was 743 as compared with 782 in 1959. The number of autopsies performed was 623. Arrangements were made by relatives or friends for the disposal of 707 bodies and by the Welfare Services Department for 33; 3 bodies were to be disposed of during 1961.

## INFANT MORTALITY

The number of deaths of children under one year of age during 1960 was 199 (males 114, females 85) as compared with 213 (males 109, females 104) in 1959. The infant mortality rate was 23 as compared with 25 for the previous year and an average of 26 for the previous five years. The provisional infant mortality rate for England and Wales was 22.

**Illegitimate Infant Mortality.**—Of the 608 illegitimate births, 19 died before reaching the age of one year, which is equal to an infant mortality rate of 31 as compared with 35 last year.

**Causes of Death.**—The principal causes of death of infants under one year of age during the year, in order of numerical importance, were prematurity 40 (20·1 per cent.), congenital malformations 39 (19·6 per cent.), pneumonia 32 (16·1 per cent.), post-natal asphyxia and atelectasis 23 (11·6 per cent.) and birth injuries 21 (10·6 per cent.).

Respiratory diseases were responsible for 37 or 18·6 per cent. of the total deaths under one year of age; in 1959 the number was 25 or 11·7 per cent. and the average for the previous five years was 30 or 14·4 per cent. For further details of causes of death of infants under one year of age, see the tables on pages 14 and 15.

**Prematurity.**—The number of deaths from prematurity was 40. The death-rate from prematurity per thousand live births was 4·6 as compared with 7·1 for the previous year and an average of 6·6 for the previous five years. There were 29 deaths assigned to various other diseases of early infancy in each of which prematurity was mentioned on the death certificate.

**Deaths in Age Groups.**—Of the total (199) infant deaths, 68 or 34·1 per cent. took place on the first day; 108 or 54·3 per cent. in the first week; 131 or 65·8 per cent. in the first month; 30 or 15·1 per cent. between one and three months; 21 or 10·6 per cent. between three and six months; 12 or 6·0 per cent. between six and nine months and 5 or 2·5 per cent. between nine and twelve months.

**Neo-Natal Mortality.**—The number of deaths occurring in the first month of life was 131 or 18 less than in the previous year, the corresponding neo-natal mortality rate being 14·9 as compared with 17·8 in 1959.

Of the total deaths under one year of age, 65·8 per cent. occurred in the first month and of deaths in the first month 51·9 per cent. occurred on the first day, 82·4 per cent. in the first week and 89·3 per cent. in the first two weeks.

**Peri-Natal Mortality.**—The term “peri-natal mortality” has been introduced to measure infant mortality due to causes operating before, during and immediately after birth and includes still-births and deaths of infants in the first week of life. The peri-natal mortality rate is calculated per thousand total births (live and still). The rate for 1960 was 30 as compared with 35 for the previous year and an average of 37 for the previous five years.

### MATERNAL MORTALITY

The number of mothers who lost their lives in childbirth during the year was 2 as compared with 4 in the previous year. The corresponding maternal mortality rate per thousand live births was 0·23 as compared with 0·48 for the previous year and an average of 0·56 for the previous five years. Calculated on the total number of births (live and still) the rate for the year was 0·22 as compared with 0·47 for the previous year and an average of 0·55 for the previous five years.

The causes of death were as follows :—

(1) la. Toxæmia of pregnancy.

(2) la. Pontine hæmorrhage.      b. Eclampsia.

## PRINCIPAL CAUSES OF DEATH

International List Nos.	Diseases	No. of deaths in 1960 (nett)	No. of deaths in 1959 (nett)	Death rate 1960
001-008	Tuberculosis, respiratory .. .. .	37	45	0.07
010-019	Tuberculosis, other forms .. .. .	4	5	0.01
020-029	Syphilitic disease .. .. .	2	13	0.00
055	Diphtheria .. .. .	..	..	..
056	Whooping Cough .. .. .	..	1	..
057	Meningococcal infections .. .. .	3	1	0.01
080	Acute poliomyelitis .. .. .	..	..	..
085	Measles .. .. .	..	1	..
Remainder of 001-138	Other infective and parasitic diseases .. ..	18	12	0.03
151	Malignant neoplasms: Stomach .. .. .	134	179	0.26
162, 163	Lung, bronchus .. .. .	269	290	0.52
170	Breast .. .. .	90	90	0.17
171-174	Uterus .. .. .	44	52	0.09
Remainder of 140-203 205 204	Other malignant and lymphatic neoplasms .. ..	487	535	0.95
260	Leukaemia, aleukaemia .. .. .	29	27	0.06
	Diabetes .. .. .	27	34	0.05
330-334	Vascular lesions of central nervous system ..	769	802	1.49
420	Coronary disease, angina .. .. .	1,223	1,156	2.38
440-443	Hypertension with heart disease .. .. .	85	108	0.17
Remainder of 410-443	Other heart disease .. .. .	598	582	1.16
444-468	Other circulatory disease .. .. .	245	235	0.48
480-483	Influenza .. .. .	2	62	0.00
490-493 783	Pneumonia .. .. .	367	463	0.71
500-502 470-475 510-527	Bronchitis .. .. .	394	500	0.77
	Other diseases of the respiratory system .. ..	59	43	0.11
540, 541 543, 571 572, 764	Ulcer of stomach and duodenum .. .. .	49	52	0.10
	Gastritis, enteritis and diarrhoea .. .. .	20	19	0.04
590-594	Nephritis and nephrosis .. .. .	30	33	0.06
610	Hyperplasia of prostate .. .. .	18	22	0.03
640-689	Pregnancy, childbirth and abortion .. .. .	2	4	0.00
750-759	Congenital malformations .. .. .	58	58	0.11
Residual	Other defined and ill-defined diseases .. ..	480	481	0.93
E810-E835 E800-E802 E840-E962	Motor vehicle accidents .. .. .	72	60	0.14
	All other accidents .. .. .	113	95	0.22
E963 E970-E979	Suicide .. .. .	60	55	0.12
E984, E985 E980-E999	Homicide and operations of war .. .. .	3	5	0.01
	Totals .. .. .	5,791	6,120	11.2

## CAUSES OF AND AGES AT DEATH DURING THE CALENDAR YEAR, 1960.

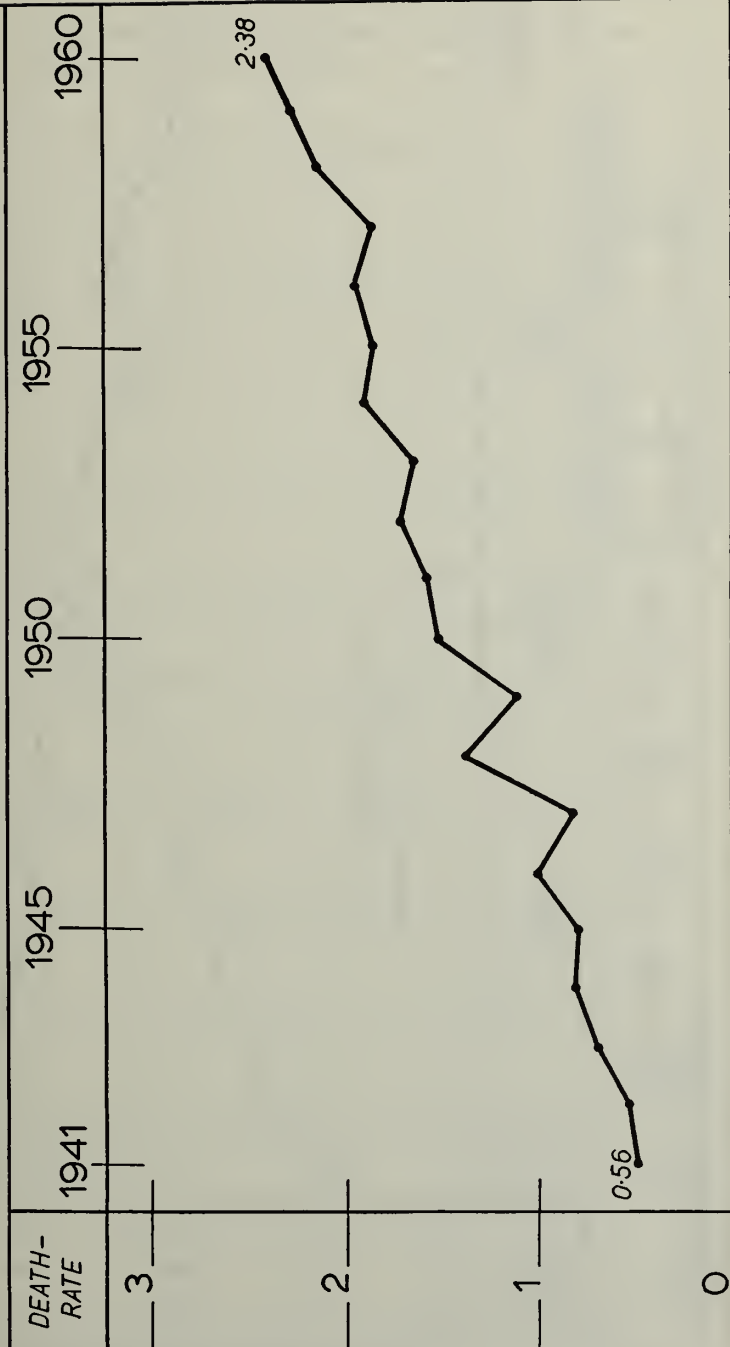
International List Nos.	Cause of Death	Nett Deaths at the subjoined ages of "Residents" whether occurring within or outside the District.										*Total Hospital Deaths in the District
		All Ages	Under 1 year	1 & under 2 years	2 & under 5 years	5 & under 15 years	15 & under 25 years	25 & under 45 years	45 & under 65 years	65 & under 75 years	75 and upwards	
001-008	Tuberculosis, respiratory ..	37	..	..	..	..	..	5	13	15	4	25
010-019	Tuberculosis, other forms ..	4	..	..	..	1	..	..	1	1	1	4
020-029	Syphilitic disease ..	2	..	..	..	..	..	..	1	1	..	3
055	Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections ..	3	2	..	1	..	..	..	..	..	..	2
080	Acute poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	..
085	Measles ..	..	..	..	..	..	..	..	..	..	..	..
Remainder of 001-138	Other infective and parasitic diseases ..	18	1	..	..	1	..	5	6	..	5	17
	Malignant neoplasms :											
151	Stomach ..	134	..	..	..	..	..	6	62	37	29	71
162, 163	Lung, bronchus ..	269	..	..	..	..	..	9	147	83	30	174
170	Breast ..	90	..	..	..	..	..	16	32	27	15	64
171-174	Uterus ..	44	..	..	..	..	..	10	12	13	9	31
Remainder of 140-203, 205	Other malignant and lymphatic neoplasms ..	487	1	..	4	..	5	26	167	160	124	359
204	Leukaemia, aleukaemia ..	29	1	..	1	4	3	6	7	4	3	38
260	Diabetes ..	27	..	..	..	..	2	1	6	6	12	17
380-384	Vascular lesions of central nervous system ..	769	..	..	..	1	..	13	161	225	369	488
420	Coronary disease, angina ..	1,223	..	..	..	..	1	26	382	389	425	552
440-443	Hypertension with heart disease ..	85	..	..	..	..	..	..	16	23	46	31
Remainder of 410-443	Other heart disease ..	598	..	..	..	..	5	18	81	114	380	292
444-468	Other circulatory disease ..	245	..	..	..	..	..	10	57	58	120	131
480-483	Influenza ..	2	..	..	..	..	..	..	2	..	..	..
490-493, 763	Pneumonia ..	367	32	5	3	4	..	6	45	77	195	282
500-502	Bronchitis ..	394	3	..	2	..	1	3	105	116	164	225
470-475	Other diseases of the respiratory system ..	59	2	1	1	..	..	2	11	11	31	49
510-527	Ulcer of stomach and duodenum ..	49	..	..	..	..	..	1	18	16	14	53
540, 541	Gastritis, enteritis and diarrhoea ..	20	5	..	..	..	..	2	6	1	6	27
572, 764	Nephritis and nephrosis ..	30	1	..	..	..	1	2	10	9	7	36
590-594	Hyperplasia of prostate ..	18	..	..	..	..	..	..	2	5	11	22
610	Pregnancy, childbirth and abortion ..	2	..	..	..	..	..	2	..	..	..	4
640-689	Congenital malformations ..	58	39	2	4	7	1	3	1	..	1	76
750-759	Other defined and ill-defined diseases ..	480	107	1	3	3	3	19	90	87	167	522
Residual	Motor vehicle accidents ..	72	..	..	4	3	10	12	24	12	7	82
E810-E835	All other accidents ..	113	5	2	2	6	8	7	21	20	42	67
E800-E802												
E840-E962												
E963												
E970-E979	Suicide ..	60	..	..	..	..	4	11	31	12	2	11
E964, E965	Homicide and operations of War ..	3	..	..	1	..	..	..	..	1	1	..
E980-E999												
	Totals ..	5,791	199	11	26	30	44	221	1,517	1,523	2,220	3,755

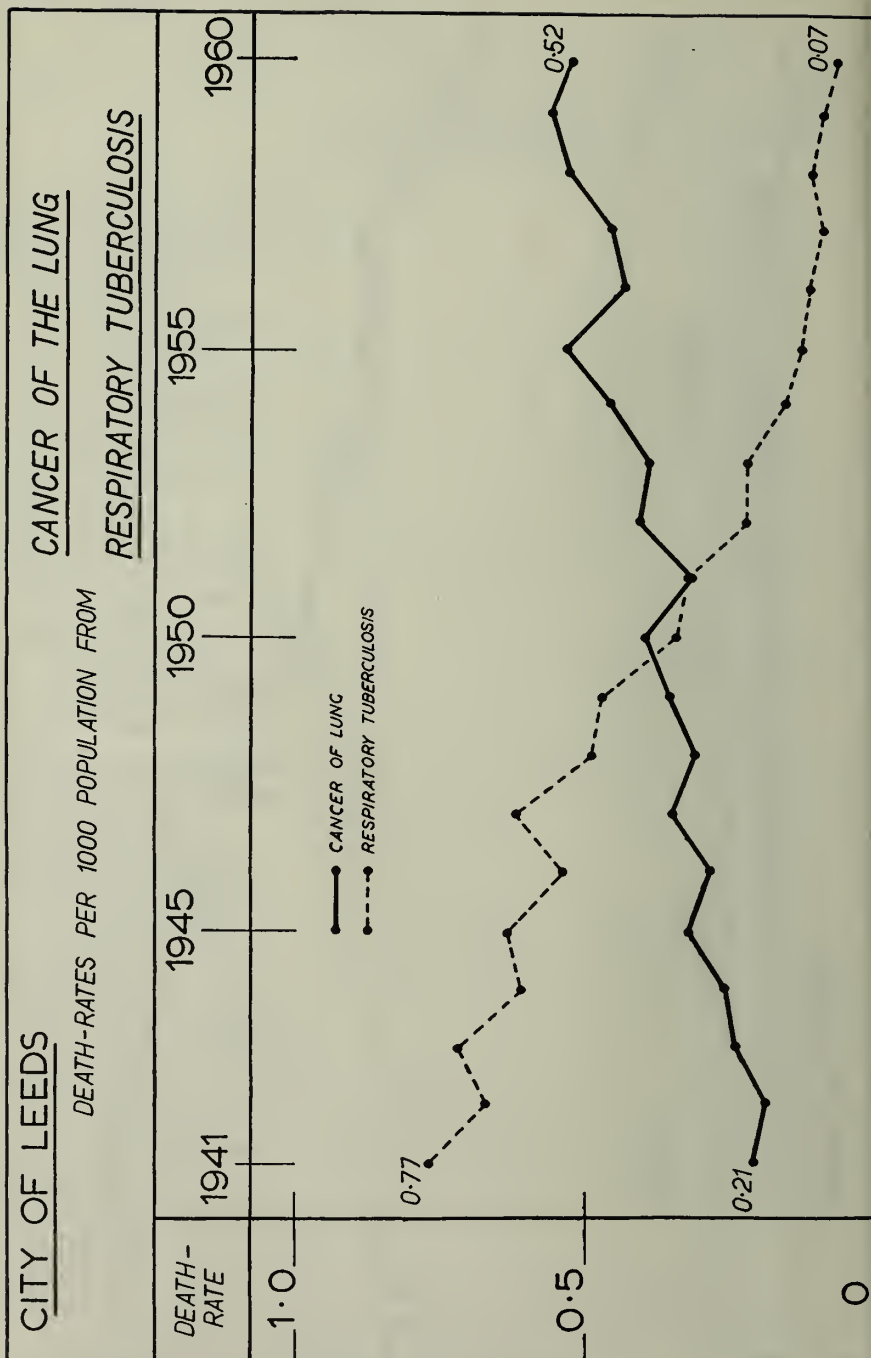
\* Total Deaths whether of "Residents" or "Non-Residents" in Hospitals and Institutions in the District.



# CITY OF LEEDS

DEATH-RATES PER 1000 POPULATION FROM CORONARY DISEASE







## DEATHS IN AGE GROUPS (NETT), 1950-1960

Together with the percentage, of the total deaths, represented by each group  
(in italics).

Year	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total
1950	250 <i>4.0%</i>	9 <i>0.1%</i>	26 <i>0.4%</i>	42 <i>0.7%</i>	60 <i>1.0%</i>	346 <i>5.5%</i>	1,609 <i>25.7%</i>	3,912 <i>62.6%</i>	6,254
1951	247 <i>3.6%</i>	20 <i>0.3%</i>	24 <i>0.4%</i>	44 <i>0.6%</i>	52 <i>0.8%</i>	327 <i>4.8%</i>	1,758 <i>25.9%</i>	4,325 <i>63.6%</i>	6,797
1952	231 <i>3.7%</i>	20 <i>0.3%</i>	32 <i>0.5%</i>	25 <i>0.4%</i>	38 <i>0.6%</i>	327 <i>5.2%</i>	1,560 <i>24.8%</i>	4,059 <i>64.5%</i>	6,292
1953	261 <i>4.4%</i>	11 <i>0.2%</i>	22 <i>0.4%</i>	30 <i>0.5%</i>	48 <i>0.8%</i>	267 <i>4.5%</i>	1,558 <i>26.4%</i>	3,700 <i>62.7%</i>	5,897
1954	198 <i>3.4%</i>	13 <i>0.2%</i>	19 <i>0.3%</i>	28 <i>0.5%</i>	30 <i>0.5%</i>	273 <i>4.7%</i>	1,546 <i>26.9%</i>	3,648 <i>63.4%</i>	5,755
1955	194 <i>3.3%</i>	17 <i>0.3%</i>	11 <i>0.2%</i>	39 <i>0.7%</i>	48 <i>0.8%</i>	273 <i>4.7%</i>	1,507 <i>25.9%</i>	3,727 <i>64.1%</i>	5,816
1956	216 <i>3.7%</i>	17 <i>0.3%</i>	17 <i>0.3%</i>	22 <i>0.4%</i>	39 <i>0.7%</i>	263 <i>4.6%</i>	1,488 <i>25.8%</i>	3,700 <i>64.2%</i>	5,762
1957	207 <i>3.6%</i>	9 <i>0.1%</i>	14 <i>0.2%</i>	34 <i>0.6%</i>	44 <i>0.7%</i>	244 <i>4.2%</i>	1,558 <i>26.8%</i>	3,711 <i>63.8%</i>	5,821
1958	218 <i>3.6%</i>	11 <i>0.2%</i>	16 <i>0.3%</i>	26 <i>0.4%</i>	38 <i>0.6%</i>	249 <i>4.2%</i>	1,512 <i>25.5%</i>	3,862 <i>65.1%</i>	5,932
1959	213 <i>3.5%</i>	17 <i>0.3%</i>	20 <i>0.3%</i>	29 <i>0.5%</i>	47 <i>0.8%</i>	227 <i>3.7%</i>	1,600 <i>26.1%</i>	3,967 <i>64.8%</i>	6,120
1960	199 <i>3.4%</i>	11 <i>0.2%</i>	26 <i>0.4%</i>	30 <i>0.5%</i>	44 <i>0.8%</i>	221 <i>3.8%</i>	1,517 <i>26.2%</i>	3,743 <i>64.6%</i>	5,791

## DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

International List Nos.	Cause of Death	1959	1960	% of total deaths under one
010	Tuberculosis of meninges and central nervous system .. ..	..	..	..
Rest of 001-019	Tuberculosis, other forms .. ..	..	..	..
020	Syphilis .. ..	..	..	..
050	Scarlet fever .. ..	..	..	..
055	Diphtheria .. ..	..	..	..
056	Whooping Cough .. ..	1	..	..
057	Meningococcal infections .. ..	..	2	1.0
085	Measles .. ..	1	..	..
340	Meningitis (non-meningococcal) ..	1	3	1.5
480-483	Influenza .. ..	2	..	..
490-493	Pneumonia (4 weeks—1 year) ..	18	28	14.1
500-502	Bronchitis .. ..	4	3	1.5
560, 561, 570	Intestinal obstruction, hernia ..	2	2	1.0
571, 572	Gastro-enteritis (4 weeks—1 year)	2	4	2.0
751	Spina bifida and meningocele ..	7	9	4.5
754	Congenital malformations of cir- culatory system .. ..	16	15	7.5
750, 752, 753 }	All other congenital malformations	14	15	7.5
755-759 }	Birth injuries .. ..	18	21	10.6
760-761	Post-natal asphyxia, atelectasis ..	27	23	11.6
762	Pneumonia of newborn (—4 weeks)	3	4	2.0
763	Diarrhoea of newborn (—4 weeks)	1	1	0.5
764	Other infections of newborn ..	..	..	..
765-768	Hæmolytic disease of newborn ..	6	..	..
770	Other diseases peculiar to early	..	..	..
769 }	infancy .. ..	5	12	6.0
771-773 }	Prematurity .. ..	59	40	20.1
774-776	Accidental mechanical suffocation	6	1	0.5
E924	Other violent causes .. ..	5	4	2.0
Rem. of E800-999	All other causes .. ..	15	12	6.0
Residual				
	Totals .. ..	213	199	..

INFANT MORTALITY 1960. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

International List Nos.	Cause of Death	-1 day	1 day	2 days	3 days	4 days	5 days	6 days	1-2 weeks	2-3 weeks	3-4 weeks	Total m'ths	1-1 m'ths	1-3 m'ths	3-6 m'ths	6-9 m'ths	9-12 m'ths	Total -1 year
010	Tuberculosis of meninges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of 001-019	Tuberculosis, other forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
020	Syphilis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
050	Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
055	Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
085	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
340	Meningitis (non-meningococcal or tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	3
486-483	Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
490-493	Pneumonia (4 weeks—1 year)	..	..	..	..	..	..	..	..	..	..	..	14	9	2	3	28	3
500-502	Bronchitis ..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	..	3
560, 561, 570	Intestinal obstruction, hernia	..	..	..	..	..	..	..	2	..	..	2	..	2	1	1	..	2
571, 572	Gastro-enteritis (4 weeks—1 year)	..	..	..	..	..	..	1	3	1	1	8	1	1	..	..	..	9
751	Spina bifida and meningocele	2	..	..	..	..	..	1	..	2	1	7	4	2	2	..	..	15
754	Congenital malformations of circulatory system	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of 759-759	All other congenital malformations	..	4	1	..	1	2	1	..	2	2	13	1	..	1	..	..	15
760, 761	Birth injuries ..	..	12	1	3	1	..	..	1	..	..	21	..	..	..	..	..	21
762	Post-natal asphyxia, atelectasis	..	15	3	5	..	..	..	..	..	..	23	..	..	..	..	..	23
763	Pneumonia of newborn (—4 weeks)	..	..	..	..	..	..	..	2	1	1	4	..	..	..	..	..	4
764	Diarrhoea of newborn (—4 weeks)	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	1
765-768	Other infections of newborn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
770	Haemolytic disease of newborn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
769, 771-773	Other diseases of newborn	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
774-776	Prematurity	8	..	1	2	..	..	..	..	..	..	11	..	..	1	..	..	12
E924	Accidental mechanical suffocation	27	3	6	..	2	..	..	..	..	..	38	1	1	1	..	..	40
Rest of E800-999	Other violent causes	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Residual	All other causes ..	..	..	..	..	..	..	..	..	1	2	3	..	3	1	4	1	4
Totals	..	68	9	15	7	4	4	1	9	7	7	131	30	21	12	5	199	5

INFANT MORTALITY DURING THE FOURTEEN YEARS 1947-1960 AT DIFFERENT PERIODS OF  
THE FIRST YEAR OF LIFE.

YEAR	Births in year	Under one week		Under one month		One and under three months		Three and under six months		Six and under nine months		Nine and under twelve months		Under one year	
		Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1947	..	178	16.4	278	25.6	125	11.5	87	8.0	41	3.8	21	1.9	552	51
1948	..	122	13.2	162	17.5	70	7.6	49	5.3	22	2.4	18	1.9	321	35
1949	..	125	14.8	156	18.5	36	4.3	29	3.4	21	2.5	12	1.4	254	30
1950	..	122	15.0	148	18.2	43	5.3	35	4.3	16	2.0	8	1.0	250	31
1951	..	125	15.5	141	17.5	36	4.5	40	5.0	19	2.4	11	1.4	247	31
1952	..	126	16.3	144	18.6	28	3.6	37	4.8	11	1.4	11	1.4	231	30
1953	..	160	20.2	182	22.9	31	3.9	21	2.6	16	2.0	11	1.4	261	33
1954	..	118	15.6	135	17.8	24	3.2	21	2.8	12	1.6	6	0.8	198	26
1955	..	123	16.1	136	17.8	19	2.5	26	3.4	7	0.9	6	0.8	194	25
1956	..	131	16.3	153	19.0	28	3.5	21	2.6	9	1.1	5	0.6	216	27
1957	..	124	14.7	150	17.8	18	2.1	23	2.7	10	1.2	6	0.7	207	25
1958	..	130	15.5	152	18.1	19	2.3	30	3.6	8	1.0	9	1.1	218	26
1959	..	130	15.6	149	17.8	22	2.6	24	2.9	7	0.8	11	1.3	213	25
1960	..	108	12.3	131	14.9	30	3.4	21	2.4	12	1.4	5	0.6	199	23

# MINISTRY OF HEALTH TABLES

## VITAL STATISTICS OF LEEDS C.B. FOR 1960 AND PREVIOUS YEARS.

Year	Population estimated to Middle of each Year	Births			Total Deaths Registered in the Area		Transferable Deaths		Nett Deaths Belonging to The Area			
		Un- corrected Number	Nett.		Number	Rate	Of Non- residents registered in the Area	Of Resi- dents not registered in the Area	Under 1 Year of Age		At all Ages	
			Number	Rate					Number	Rate per 1,000 Nett Births	Number	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1942	462,400	7,355	7,204	15.6	6,256	13.5	589	423	369	51	6,090	13.2
1943	453,900	7,830	7,547	16.6	6,532	14.4	595	421	356	47	6,358	14.0
1944	451,100	8,611	8,518	18.9	6,314	14.0	601	411	429	50	6,124	13.6
1945	451,670	8,258	7,760	17.2	6,580	14.6	595	425	438	56	6,410	14.2
1946	481,570	10,267	9,886	20.5	6,795	14.1	570	389	401	41	6,614	13.7
1947	492,140	11,394	10,875	22.1	6,982	14.2	567	378	552	51	6,793	13.8
1948	501,900	9,938	9,234	18.4	6,106	12.2	600	396	321	35	5,902	11.8
1949	504,900	9,146	8,447	16.3	6,757	13.4	630	324	254	30	6,451	12.8
1950	509,700	8,857	8,113	15.9	6,437	12.6	579	396	250	31	6,254	12.3
1951	503,030	8,700	8,044	16.0	6,983	13.9	595	409	247	31	6,797	13.5
1952	504,800	8,250	7,740	15.3	6,446	12.8	597	443	231	30	6,292	12.5
1953	505,500	8,465	7,932	15.7	6,354	12.6	643	186	261	33	5,897	11.7
1954	507,200	8,185	7,584	15.0	6,224	12.3	649	180	198	26	5,755	11.3
1955	507,400	8,259	7,630	15.0	6,295	12.4	647	168	194	25	5,816	11.5
1956	508,600	8,640	8,033	15.8	6,270	12.3	693	185	216	27	5,762	11.3
	509,790*											
1957	510,100†	9,023	8,429	16.5	6,309	12.4	695	207	207	25	5,821	11.4
1958	511,600	8,995	8,379	16.4	6,393	12.5	778	317	218	26	5,932	11.6
1959	513,300	9,045	8,353	16.3	6,481	12.6	787	426	213	25	6,120	11.9
1960	514,760	9,483	8,789	17.1	6,205	12.1	863	449	199	23	5,791	11.2

Total population at all ages at the 1951 Census 505,219

Area of Leeds C.B. }  
in acres (land and } 40,613.5  
inland water)

\* Population used for calculating vital statistics to allow for change in boundary.

† Mid-year population after change in boundary

TABLE II. CASES OF INFECTIOUS DISEASES ORIGINALLY NOTIFIED BEFORE ALTERATION OF DIAGNOSIS DURING THE CALENDAR YEAR 1960.

NOTIFIABLE DISEASE	NUMBER OF CASES NOTIFIED.																		Total Cases removed to Hospital	
	At all Ages				At Ages—Years.															
	M.	F.	M.	F.	Under 1	1 and under 5 years	5 and under 15 years	15 and under 25 years	25 and under 45 years	45 and under 65 years	65 and upwards	M.	F.	M.	F.	M.	F.	M.	F.	
*Anthrax	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	
Diphtheria	3	2	..	..	..	2	1	..	1	..	..	..	..	..	..	..	..	3	2	
Dysentery	605	600	41	50	260	169	127	101	34	78	81	109	58	49	1	35	44	30	30	
Encephalitis, acute { Infective	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	
Post-infectious	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Erysipelas	26	26	..	..	1	1	..	..	4	6	14	9	7	10	3	7	7	7	7	
Food poisoning	76	80	3	3	24	22	12	9	8	12	10	18	14	11	5	10	10	7	7	
Malaria	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Measles	1,380	1,267	65	66	723	641	589	557	3	2	..	1	..	..	..	23	18	..	..	
Meningococcal infections	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Ophthalmia neonatorum	11	7	11	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Paratyphoid fever	1	1	..	..	1	1	..	..	..	..	..	..	..	..	..	1	1	..	..	
Pneumonia (acute primary)	291	201	39	19	49	26	19	18	9	10	33	22	74	50	68	56	148	73	73	
(acute influenza)	14	9	..	..	..	..	..	..	1	2	4	2	7	2	2	3	..	..	..	
Poliomyelitis	5	6	..	..	1	..	2	2	1	1	3	..	..	..	..	6	5	..	..	
Puerperal pyrexia	..	186	..	..	..	..	..	..	86	..	..	99	1	..	..	..	..	3	3	
Scarlet fever	190	229	2	1	63	57	116	165	8	4	..	1	1	1	..	..	15	16	16	
Typhoid fever	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Whooping cough	442	469	67	61	232	239	141	156	1	6	..	..	4	1	3	..	46	45	45	
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Non-notifiable diseases	320	290	80	61	84	67	77	60	17	38	27	35	19	17	16	12	320	290	290	
Totals	3,369	3,374	309	268	1,439	1,225	1,085	1,068	83	240	162	300	180	152	111	121	620	499	499	
Respiratory tuberculosis	207(17)	153(19)	2	1	9	9(1)	10	12(1)	21(2)	30(5)	67(10)	70(10)	79(5)	25(2)	19	6	112	78	78	
Other forms of tuberculosis	13(1)	24(1)	..	1	..	2	5	..	1(1)	5	3	11(1)	1	3	3	2	8	8	8	

The figures shown in brackets are "Transfer in" Cases and are included in totals.  
 \* Anthrax notifiable as from 1st December, 1960. One case was notified prior to 1st December under the Factories Act, 1937.



TABLE IIA. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE CALENDAR YEAR 1960.

NOTIFIABLE DISEASE	NUMBER OF CASES NOTIFIED															
	At all Ages				At Ages—Years								Total Cases removed to Hospital			
	Under 1				1 and under 5 years		5 and under 15 years		15 and under 25 years		25 and under 45 years		45 and under 65 years		65 and upwards	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Anthrax .. .. .	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..
Diphtheria .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery .. .. .	586	594	37	45	252	169	127	103	33	78	78	107	47	58	45	35
Encephalitis, acute { Infective .. .. .	2	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..
Post-infectious .. .. .	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas .. .. .	24	25	..	..	..	1	..	..	..	..	3	6	14	8	1	6
Food poisoning .. .. .	109	100	10	10	40	26	14	11	8	14	14	23	17	11	23	17
Malaria .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles .. .. .	1,381	1,268	66	66	723	641	589	558	3	2	..	1	..	..	24	19
Meningococcal infections .. .. .	1	2	1	..	..	..	2	..	..	..	..	..	..	..	..	2
Ophthalmia neonatorum .. .. .	11	7	11	7	..	..	..	..	..	1	..	..	..	..	..	..
Paratyphoid fever .. .. .	2	2	..	..	2	1	..	..	..	..	32	23	66	52	2	2
Pneumonia (acute primary) .. .. .	309	225	62	30	48	34	27	23	10	9	5	2	7	2	166	97
(acute influenza) .. .. .	15	9	..	..	..	..	..	..	1	2	..	..	..	..	1	..
Poliomyelitis .. .. .	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Puerperal pyrexia .. .. .	..	185	..	..	..	..	..	..	..	86	..	98	1	..	..	2
Scarlet fever .. .. .	191	224	2	1	64	55	117	163	7	3	..	1	1	1	16	11
Typhoid fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough .. .. .	438	460	64	58	230	235	142	154	1	6	..	4	1	3	..	35
Smallpox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases .. .. .	298	272	56	51	78	63	68	54	20	39	29	34	27	16	20	272
Totals .. .. .	3,369	3,374	309	268	1,439	1,225	1,085	1,068	83	240	162	300	180	152	111	620
Respiratory tuberculosis .. .. .	207(17)	153(19)	2	1	9	9(1)	10	12(1)	21(2)	30(5)	67(10)	70(10)	79(5)	25(2)	19	112
Other forms of tuberculosis .. .. .	13(1)	24(1)	..	1	..	2	5	..	1(1)	5	3	11(1)	1	3	3	8

The figures shown in brackets are "Transfer in " Cases and are included in totals.



TABLE IIA. (continued).

TOTAL ACCEPTED CASES (AFTER CORRECTION OF DIAGNOSIS) IN EACH MUNICIPAL WARD OF THE DISTRICT.																												
NOTIFIABLE DISEASE	City																											
	Blenheim	Westfield	Wellington	Hyde Park	Kirkstall	Far Headingley	Meanwood	Woodhouse	Moortown	Allerton	Roundhay	Richmond Hill	Potternewton	Harehills	Burmantofts	East Hunslet	Osmondthorpe	Cross Gates	Halton	Beeston	Holbeck	Hunslet Carr	Middleton	Armley	Wortley	Bramley	Stanningley	Total City
Anthrax ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Diphtheria ..	..	..	..	..	..	..	..	..	64	43	23	33	86	19	39	75	8	47	7	41	20	31	73	30	20	56	15	1,180
Dysentery ..	52	132	47	9	14	18	15	120	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	2
Encephalitis, ac. } Inf. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	..	..	1	..	4	1	8	3	5	..	1	2	..	3	1	3	1	4	3	..	1	1	1	1	1	1	1	49
Food poisoning ..	6	3	4	14	16	5	2	11	8	2	4	10	5	7	5	7	4	7	9	4	20	14	21	5	2	6	4	209
Malaria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles ..	10	25	14	104	27	151	12	58	28	80	137	39	137	65	54	89	87	468	131	167	93	92	104	72	30	136	213	2,649
Meningococcal infections ..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	3
Ophthalmia neonatorum ..	1	1	..	2	4	..	1	1	1	..	..	1	2	..	..	..	..	2	1	..	..	..	..	..	..	..	..	18
Paratyphoid fever ..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	4
Pneumonia (ac. primary) ..	15	20	24	13	14	9	17	33	6	14	15	19	17	7	9	20	23	80	33	7	16	12	16	32	17	9	12	534
" (ac. influenza) ..	1	1	1	..	2	..	1	..	..	..	..	..	1	2	1	..	4	..	5	..	..	..	..	2	2	1	..	24
Poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Puerperal pyrexia ..	..	..	..	..	..	1	..	3	..	1	1	136	3	..	..	1	..	..	1	..	..	..	..	..	..	..	..	185
Scarlet fever ..	9	11	4	5	19	26	17	12	45	22	16	5	15	8	3	9	7	40	16	13	12	13	20	11	5	31	17	415
Typhoid fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough ..	28	41	43	30	17	35	26	15	39	26	14	31	36	7	28	20	117	131	65	8	5	19	66	6	9	5	6	898
Smallpox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases ..	21	29	28	10	17	11	10	16	12	16	20	48	27	6	28	13	21	94	19	11	20	12	35	8	3	17	8	570
Totals ..	143	265	199	198	121	151	98	297	195	192	248	318	329	125	168	238	272	877	290	251	187	195	337	169	89	266	275	6,743
Respiratory tuberculosis ..	7	16(2)	22(4)	10(2)	15	9(2)	11(4)	22(2)	8(1)	7(3)	11(1)	7	21(2)	13	17(1)	11(1)	20	16	5(1)	13	12	11(2)	17(2)	5(2)	6(1)	15	22	360(36)
Other forms of tuberculosis ..	..	1	6	2	1(1)	..	2	2	2(1)	..	2	..	3	..	2	2	3	3	..	..	2	..	..	..	2	1	1	37(2)

The figures shown in brackets are "Transfer in" Cases and are included in totals.



CITY OF LEEDS  
VITAL STATISTICS 1920 - 1960

Year	Population	Births	Birth-Rate	Deaths	Death-Rate	INFANT MORTALITY			STILL-BIRTHS		MATERNAL MORTALITY				DIARRHEA AND ENTERITIS		TUBERCULOSIS (All Forms)		CANCER		Deaths from Respiratory Diseases (inc. Influenza but excl. Pul. Tub.)	DIPHTHERIA			SCARLET FEVER		TYPHOID FEVER		MEASLES		WHOOPING COUGH	
						Deaths — 1 year	Rate per 1,000 live births	Neo-Natal Mortality Rate	No.	Rate per 1,000 population	Deaths from Sepsis	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 2 years	Death-Rate per 1,000 births	Deaths	Death-Rate	Deaths	Death-Rate		Cases	Deaths	No. of persons immunised	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1920	448,913	11,229	25.0	6,591	14.7	1,232	110	46.3	..	..	29	28	57	5.07	140	12.5	698	1.56	492	1.10	1,513	885	64	..	1,363	17	29	4	5,459	148	..	100
1	465,500	10,144	21.8	6,285	13.5	997	98	41.3	..	..	8	30	38	3.75	184	18.1	641	1.37	554	1.19	1,360	665	38	..	1,526	14	24	2	209	5	..	72
2	466,700	9,253	19.8	6,479	13.9	935	101	43.3	..	..	14	18	32	3.46	92	9.9	653	1.40	595	1.27	1,357	470	28	..	2,722	33	14	7	9,932	152	..	115
3	469,900	8,684	18.5	5,986	12.7	773	89	41.8	..	..	10	35	45	5.18	118	13.6	637	1.36	574	1.22	1,179	368	20	..	2,134	31	9	1	4,683	50	..	32
4	471,600	8,558	18.1	6,747	14.3	921	108	38.7	..	..	9	24	33	3.86	103	12.0	657	1.40	639	1.35	1,777	289	27	..	1,256	20	25	6	6,654	46	..	87
5	472,900	8,180	17.3	6,037	12.8	748	91	37.8	..	..	24	21	45	5.50	149	18.2	599	1.27	606	1.28	1,262	422	39	..	1,166	15	9	3	5,100	39	..	47
6	473,400	8,065	17.0	6,062	12.8	748	93	38.7	..	..	14	27	41	5.08	147	18.2	585	1.24	657	1.39	1,099	374	26	..	756	5	9	1	7,076	19	..	119
7	477,600	7,790	16.3	6,198	13.0	629	81	35.2	..	..	14	24	38	4.88	88	11.3	558	1.17	649	1.36	1,070	439	28	..	773	6	14	2	8,569	117	..	44
8	474,800	7,665	16.1	6,133	12.9	606	79	37.3	..	..	14	22	36	4.70	105	13.7	542	1.14	698	1.47	976	634	21	94	3,515	18	6	1	3,638	21	..	36
9	478,500	7,426	15.5	7,898	16.5	722	97	42.3	†369	0.77	10	23	33	†4.23	86	11.6	621	1.30	684	1.43	2,037	536	26	107	3,473	29	14	3	9,486	102	..	107
1930	478,500	7,568	15.8	5,930	12.4	512	68	38.5	332	0.69	10	22	32	4.05	34	4.5	533	1.11	728	1.52	798	994	54	179	2,383	23	4	2	913	2	..	32
1	486,400	7,219	14.8	6,506	13.4	552	76	32.3	367	0.75	17	22	39	5.14	68	9.4	527	1.08	740	1.52	1,047	995	86	318	1,467	12	10	2	10,955	56	..	43
2	484,900	7,004	14.4	6,469	13.3	617	88	36.4	334	0.69	8	13	21	2.86	106	15.1	493	1.02	760	1.57	966	889	48	1,524	931	8	9	..	3,540	52	..	41
3	485,000	6,643	13.7	6,574	13.6	537	81	36.6	333	0.69	15	12	27	3.87	104	15.7	499	1.03	706	1.46	1,148	1,057	88	726	1,906	9	10	1	3,973	22	..	28
4	486,250	7,190	14.8	6,291	12.9	513	71	35.0	320	0.66	15	14	29	3.86	76	10.6	462	0.95	801	1.65	711	2,231	156	2,452	2,711	16	8	1	10,576	90	..	25
5	487,200	7,211	14.8	6,432	13.2	463	64	33.1	334	0.69	8	16	24	3.18	62	8.6	435	0.89	803	1.65	772	1,335	60	30,062	2,082	5	5	..	1,341	4	..	48
6	489,800	7,340	15.0	6,666	13.6	476	65	30.0	320	0.65	10	14	24	3.13	71	9.7	408	0.83	843	1.72	803	799	36	1,937	1,868	12	4	..	8,744	49	..	28
7	491,860	7,279	14.8	6,573	13.4	491	67	33.2	313	0.64	6	11	17	2.24	65	8.9	406	0.83	777	1.58	959	941	44	1,135	2,234	5	16	3	2,373	9	..	19
8	494,000	7,614	15.4	6,255	12.7	490	64	33.1	329	0.67	2	12	14	1.76	94	12.3	397	0.80	879	1.78	625	948	33	11,172	1,717	8	3	..	6,797	18	..	13
9*	(a) 497,000	7,079	14.2	6,535	13.4	401	57	30.2	307	0.62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	427	20	894	960	2	12	1	1,673	2	1132	18
	(b) 488,000	7,079	14.2	6,535	13.4	401	57	30.2	307	0.62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	427	20	894	960	2	12	1	1,673	2	1132	18
1940	465,700	6,946	14.9	6,918	14.9	395	57	30.8	282	0.61	2	13	15	2.09	44	6.4	467	1.00	778	1.67	990	301	11	1,167	643	..	35	1	4,364	8	128	2
1	471,930	6,667	14.1	6,456	13.7	407	61	26.7	259	0.55	7	9	16	2.32	40	6.0	408	0.86	849	1.80	740	576	22	13,208	887	3	12	1	7,006	21	2,105	25
2	462,400	7,204	15.6	6,090	13.2	369	51	29.7	278	0.60	6	13	19	2.54	32	4.4	357	0.77	888	1.92	589	707	25	15,101	1,576	1	8	..	7,810	10	1,554	32
3	453,900	7,547	16.6	6,358	14.0	356	47	23.7	250	0.55	4	15	19	2.44	40	5.3	378	0.83	906	2.00	808	334	11	19,415	1,998	3	2	..	2,426	14	1,284	14
4	451,100	8,518	18.9	6,124	13.6	429	50	28.4	262	0.58	..	12	12	1.37	76	8.9	316	0.70	915	2.03	608	254	9	7,483	1,913	3	5	1	678	..	1,213	6
5	451,670	7,760	17.2	6,410	14.2	438	56	28.6	248	0.55	4	10	14	1.75	88	11.3	318	0.70	969	2.15	740	149										



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## Infectious and other Diseases

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## INFECTIOUS AND OTHER DISEASES

BY

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The most striking feature of the year was the fall in incidence of poliomyelitis. Only one case of this disease occurred, the lowest number since 1945. The incidence of dysentery and food poisoning remained high.

Once again it is a pleasure to record thanks to Dr. G. B. Ludlam and Dr. B. P. Marmion and their staff at the Public Health Laboratory for much help and advice, and also to Dr. E. C. Benn of Seacroft Hospital.

**Diphtheria.**—No case of this disease occurred during the year as compared with one last year.

**Scarlet Fever.**—There was again a decrease in the number of accepted cases of this disease during the year, 415 as compared with 620 in 1959 and 678 in 1958. Of the 415 cases, 27 (6·5 per cent.) were treated in Seacroft Hospital. The case rate was 0·81 as compared with 1·21 for the previous year. The disease continues to be mild. There were no deaths.

**Smallpox, Typhoid and Paratyphoid Fevers, Typhus, Plague and Cholera.**—No case of smallpox, typhoid fever, typhus, plague or cholera occurred during the year. One smallpox contact was kept under observation.

There were 4 accepted cases of paratyphoid B fever, all untypeable strains. Three of the patients were children, aged one year, 2 years and 3 years respectively, and the other was a girl aged 15 years. All were removed to Seacroft Hospital. In only one case was it

possible to trace a likely source of infection, which was the mother of the 2-year old patient. The parents of this child returned to England from Northern Rhodesia three years ago. The mother said that just before her return to England she was ill for two or three days with diarrhoea but thought nothing of it as this complaint is common in Northern Rhodesia. On confirmation of the child's illness, faeces and urine specimens were obtained from the parents and paratyphoid B (untypeable strain) was isolated from the faeces of the mother. Specimens from her husband were negative. She had no clinical symptoms of paratyphoid and it seems reasonable to suspect that she had a mild attack of the disease before leaving Northern Rhodesia and that she has since remained a carrier and had infected her child. She was still an intermittent excreter of paratyphoid at the end of the year. Her child was discharged from hospital in February clinically well but still excreting paratyphoid B and the condition has not yet cleared up.

The two other children (brother and sister) were discharged from hospital in October clinically well but still excreting paratyphoid B. Their condition is still unchanged. All the children and the mother in question are under observation and periodic specimens are being taken.

During the year 9 typhoid and paratyphoid fever contacts were kept under observation as were 5 chronic typhoid carriers.

During the year one "other" case was referred to the Department by a medical practitioner for a second opinion; this was visited and diagnosed as scarlet fever.

**Measles.**—The number of accepted cases of this disease during the year was 2,649 as compared with 8,693 last year (an epidemic year for measles) and 806 in 1958. Of the total cases, 43 were treated in Seacroft Hospital. There were no deaths.

**Whooping Cough.**—There was an increase in the number of accepted cases of whooping cough during the year, 898 as compared with 642 last year and 698 in 1958. Of the total cases, 77 (8·6 per cent.) were treated in Seacroft Hospital. There were no deaths.

**Puerperal Pyrexia.**—There were 185 accepted cases of puerperal pyrexia during the year as compared with 183 last year and 121 in 1958. Of the total, 174 (94·1 per cent.) occurred in hospitals and 11 (5·9 per cent.) in the practices of general medical practitioners and midwives. Two cases were treated in Seacroft Hospital. There were no deaths.

**Ophthalmia Neonatorum.**—The number of accepted cases of ophthalmia neonatorum during the year was 18, as compared with 16 last year and 10 in 1958. No case required treatment in Seacroft Hospital. All cases recovered.

**Erysipelas.**—Accepted cases of this disease numbered 49 as compared with 58 last year. Of these, 7 (14·3 per cent.) were treated in Seacroft Hospital. There were no deaths.

**Anthrax.**—Two cases of anthrax were notified during the year. Both were males, aged 30 years and 36 years respectively, and were employed at a tannery in the city. H.M. Inspector of Factories in Leeds was informed of each case. The necessary disinfection was carried out by this Department. One case was treated in the Leeds General Infirmary and the other in Seacroft Hospital. Both recovered.

*The Public Health (Infectious Diseases) Amendment Regulations, 1960.*—These Regulations, which came into operation on 1st December, 1960, provide for the notification of all cases of anthrax to the Medical Officer of Health as well as to the Chief Inspector of Factories. Previously this disease was notifiable only to the Chief Inspector of Factories under the Factories Act, 1937. A copy of the new Regulations together with a covering letter was sent to each general practitioner in the city.

**Dysentery.**—Accepted cases totalled 1,180, as compared with 1,726 last year and 1,260 in 1958. There was one death a male aged 79 years who died in Seacroft Hospital. Although there was a decrease in the number of cases this year as compared with the two previous years, the incidence of this disease still remains high. Of the 1,180 cases, 1,074 occurred at home, 9 in hospitals and institutions and 97 in day nurseries. The number treated in Seacroft Hospital was 80



or 6·8 per cent. of the total. Of the cases, 317 were *Sonne*, 69 *Flexner* and one amoebic, whilst the remaining 793 were not typed. There were again outbreaks of *Sonne* dysentery in a number of day nurseries and these accounted for 92 cases (87 children and 5 staff). Five of the children were removed to Seacroft Hospital. At one of the nurseries, two children gave fæces which were positive for *Flexner* dysentery and at another, one child was found positive for *Salmonella typhi-murium*. Sporadic cases of *Sonne* dysentery also occurred during the year at three day nurseries and three hospitals in the city. All these cases were bacteriologically confirmed and all recovered. During August, 21 cases of suspected dysentery were notified from an old peoples' hostel in the city. Fæces specimens were obtained from a number of those affected but in no cases were any pathogenic organisms isolated. The outbreak was of short duration and all recovered.

In October three cases of *Sonne* dysentery, all children, were removed from a general hospital in the city to Seacroft Hospital.

**Acute Poliomyelitis (including Polioencephalitis).**—There was only one accepted case of this disease during the year as compared with 11 last year. The patient was a woman aged 41 years who was admitted to Seacroft Hospital in January suffering from a mild paralytic form of the disease. She made a complete recovery. Virological tests gave negative results.

This is the lowest number of cases since 1945. It seems likely that vaccination against poliomyelitis has played a large part in reducing the incidence.

Cases and deaths for the past five years are as follows :—

Year	Cases	Deaths
1959 ..	11	—
1958 ..	95	3
1957 ..	41	1
1956 ..	23	—
1955 ..	60	2

Individual case record cards on all notified or reported cases of poliomyelitis were again forwarded to the Medical Research Council.

**Acute Encephalitis.**—Two cases of acute infectious encephalitis and one post-infectious encephalitis were notified during the year. Of the former, one case was treated in Seacroft Hospital (Infectious Diseases Wards) and the other in the non-infectious diseases side of the hospital. The post-infectious case was diagnosed in the non-infectious diseases side of the same hospital. There was one death from acute encephalitis; this was a female aged 61 years who died in St. James's Hospital (certified by the Coroner after a post-mortem without inquest).

**Meningococcal Infection.**—There were 3 accepted cases of meningococcal infection during the year as compared with 7 last year. Two of the cases were treated in Seacroft Hospital. There were 3 deaths.

**Food Poisoning.**—The number of accepted cases of food poisoning or suspected food poisoning during the year was 209 as compared with 168 last year and 165 in 1958. Of the total, 96 proved to be *Salmonella* infections; of these, 40 were admitted to Seacroft Hospital. There was one death from *Salmonellosis*, a male child aged 5 months who died in Seacroft Hospital. The cause of death was as follows:—  
1a. Broncho-pneumonia, b. *Salmonellosis*, 2. Mongolism (certified by the Coroner after post-mortem without inquest). The *salmonella* organisms isolated were as follows:—

Salmonella	typhi-murium	..	..	45
„	stanley	..	..	34
„	heidelberg	..	..	9
„	durham	..	..	3
„	anatum	..	..	1
„	bovis morbificans		..	1
„	give	..	..	1
„	muenchen	..	..	1
„	thompson	..	..	1
				—
				96
				==

During the year 37 persons were found on faecal testing to be symptomless excreters of *Salmonella* organisms, whilst 33 other persons gave faeces which were positive for *Salmonellae* not considered to be food-borne.

Included in the total cases of actual or suspected food poisoning were 113 cases which occurred in different households and which were bacteriologically negative. None of these cases required admission to hospital and there were no deaths.

An unusually large number of cases of food poisoning due to *Salmonella stanley* occurred during the months of September, October and November. Despite thorough investigations no common food factor could be traced in any of these cases. Numerous samples of foodstuffs were taken for bacteriological examination by the Public Health Laboratory but all except two proved negative for food poisoning organisms.

In the first, a sample of beef sausage was found to contain *Salmonella stanley*. The wife of the proprietor of the shop who manufactured and sold the sausage was identified as a faecal excreter of *Salmonella stanley*. She had had no clinical symptoms of food poisoning. Her condition soon cleared up and three consecutive negative specimens were obtained within three weeks. During this period a series of specimens were taken from her husband, her children and an assistant in the branch shop; all proved negative. The shop and the premises where the sausage was manufactured were inspected and samples of sausage, raw beef, minced beef and roast pork were taken for bacteriological examination by the Public Health Laboratory but no pathogenic organisms were isolated from any of these samples.

The second instance was when a sample of liver sausage taken at a Continental food shop in the city proved to contain *Salmonella tennessee*. No cases of food poisoning due to *S. tennessee* have been identified during the year. The sausage was manufactured by a firm in Barking, Essex, and full details were forwarded to the

Medical Officer of Health for that area who arranged for samples to be taken at the place of manufacture, but unfortunately it was not possible to obtain any of the product made at the same time or earlier than when our sample was taken. All the samples taken at the place of manufacture proved negative for food poisoning organisms as also were eight other samples of various continental sausages obtained from the retailer's shop in Leeds. Fæces specimens were obtained from all members of the staff at the retailer's shop and all gave negative results. The liver sausage from the shop in Leeds was seized and condemned.

**Influenza.**—There were 2 deaths from influenza during the year as compared with 62 in 1959. The death-rates per thousand population were 0.004 and 0.12 respectively.

**Pneumonia.**—Accepted cases during the year numbered 558, of which 534 (95.7 per cent.) were primary and 24 (4.3 per cent.) influenzal. The corresponding figures for 1959 were 653, of which 555 (85.0 per cent.) were primary and 98 (15.0 per cent.) influenzal. There were 367 deaths from all forms of pneumonia (including 4 deaths from pneumonia of the newborn) as compared with 463 last year. The mortality rates were 0.71 and 0.90 respectively.

**Bronchitis.**—There were 394 deaths assigned to this disease as compared with 500 in the previous year. The death-rates were 0.77 and 0.97 respectively.

**Diarrhœa and Enteritis.**—The number of deaths of children under two years of age from diarrhœa and enteritis during the year was 5 as compared with 4 in 1959. The death-rates per thousand live births were 0.57 and 0.48 respectively.

**Venereal Diseases.**—The number of deaths assigned as due to venereal diseases was 2 which is equal to a death-rate of 0.004 per thousand of the population. The corresponding figures for 1959 were 13 and 0.03 respectively. For details of the work of the Treatment Centre at Leeds General Infirmary, see page 105.

**Incidence of Blindness.**—I am indebted to the Welfare Services Officer for the following statistical information regarding the admission of persons to the Register of Blind and Partially Sighted during the year.

**A. FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY SIGHTED PERSONS.**

(i) Number of cases registered during the year in respect of which para. 7 (c) of Forms B.D.8 recommends :— (a) No treatment (b) Treatment (medical, surgical or optical) ..	CAUSE OF DISABILITY			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
(a) No treatment	16	10	..	65
(b) Treatment (medical, surgical or optical) ..	50	22	..	53
(ii) Number of cases at (i)(b) above which on follow-up action have received treatment .. ..	23	22	..	43

**B. OPTHALMIA NEONATORUM.**

(i) Total number of cases notified during the year .. ..	18
(ii) Number of cases in which :— (a) Vision lost .. ..	..
(b) Vision impaired .. ..	..
(c) Treatment continuing at end of year .. ..	..

**Malignant and Lymphatic Neoplasms.**—The appended table gives details of deaths assigned to malignant and lymphatic neoplasms. The total of 1,053 deaths in this group of diseases is 120 less than last year's total.

1960 Cause of Death*	Age Groups																		All Ages		Gra Tot
	-1		1-		2-		5-		15-		25-		45-		65-		75-				
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Malignant Neoplasms:																					
Buccal cavity and pharynx (140-148) .. .. .						1	..	..	..	..	1	1	1	4	4	2	3	1	9	9	1
Oesophagus (150) .. .. .						..	..	..	..	..	..	1	2	..	5	4	4	5	11	10	2
Stomach (151) .. .. .						..	..	..	..	..	4	2	43	19	23	14	14	15	84	50	13
Other digestive organs (152-159)					1	..	..	..	..	..	1	5	40	28	24	50	24	39	90	122	21
Trachea, lung and bronchus (162-163) .. .. .					..	..	..	..	..	..	7	2	132	15	71	12	24	6	234	35	26
Other respiratory organs (160, 161, 164, 165) .. .. .					..	..	..	..	..	..	..	..	3	3	5	1	1	1	9	5	1
Breast (170) .. .. .					..	..	..	..	..	..	..	16	..	32	..	27	..	15	..	90	9
Cervix uteri (171) .. .. .					..	..	..	..	..	..	..	10	..	7	..	6	..	3	..	26	2
Other parts of uterus (172-174)					..	..	..	..	..	..	..	..	..	5	..	7	..	6	..	18	1
Male genital organs (177-179) ..					..	..	..	..	..	..	1	..	6	..	15	..	14	..	36	..	3
Skin (190-191) .. .. .					..	..	..	..	..	..	..	1	1	1	1	2	..	2	2	6	
Bone and connective tissue (196-197) .. .. .					..	..	..	..	..	1	1	..	..	..	1	2	1	1	..	4	3
All other sites (Rem. of 140-199) .. .. .					..	2	..	..	1	2	3	6	31	33	18	20	13	14	66	77	14
Neoplasms of lymphatic tissues (200-203) .. .. .	1	..	..	..	..	..	..	..	..	..	5	1	11	2	1	5	1	1	19	9	2
Leukæmia and aleukæmia (204)	1	..	..	..	..	1	3	1	2	1	6	..	6	1	3	1	3	..	24	5	2
Mycosis fungoides (205) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Total .. .. .	2	..	..	..	1	4	3	1	4	4	28	45	276	151	172	152	102	108	588	465	1,053

\*International List Numbers are shown in brackets.

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# Tuberculosis

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## TUBERCULOSIS STATISTICS

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The number of cases on the register at the end of 1960 was 2,979, as compared with 3,441 at the end of 1959, a decrease of 462.

**Notifications.**—During the year 360 cases of respiratory tuberculosis (of which 36 were transfers from other areas) and 37 non-respiratory (of which 2 were transfers from other areas) were notified, making a total of 397 cases of which 38 were transfers. Compared with the previous year there was a decrease of 20 in the respiratory notifications and a decrease of 2 in the non-respiratory notifications. Compared with the average of the previous five years there was a decrease of 63 in the respiratory notifications and a decrease of 13 in the non-respiratory notifications.

The case-rate of respiratory tuberculosis was 0.70, of non-respiratory 0.07 and of all forms of the disease 0.77 as compared with 0.74, 0.08 and 0.82 respectively for the previous year.

Of the total cases of respiratory tuberculosis, 11.9 per cent. were children under the age of 15 years, 14.2 per cent. persons between 15 and 25 years and 73.9 per cent. were in the remaining age groups. The corresponding figures for the previous year were 9.2 per cent. 17.6 per cent. and 73.2 per cent. respectively.

With regard to the non-respiratory type of disease, 21.6 per cent. were children under 15 years and 78.4 per cent. were persons over 15 years. The corresponding figures for the previous year were 33.3 per cent. and 66.7 per cent. respectively.

Of the total cases, 251 were notified by the Senior Chest Physician, 19 were notified by general medical practitioners, 89 came from hospitals and 38 were transfers from other areas.

The number of cases of respiratory tuberculosis not heard of until time of death was 15 (including 4 posthumous notifications) and the number of non-respiratory 1, making a total of 16, a decrease of 6 as compared with the figure for the previous year.

Out of a total of 41 deaths from all forms of tuberculosis, one died within 7 days of notification and 3 died between 28 days and 12 months after notification.

The following tables give details of notifications of tuberculosis received during the year.

#### RESPIRATORY.

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	2	9	10	21 (2)	29 (3)	38 (7)	39 (4)	40 (1)	19	207 (17)
Females	1	9 (1)	12 (1)	30 (5)	41 (8)	29 (2)	14 (1)	11 (1)	6	153 (19)
Totals	3	18 (1)	22 (1)	51 (7)	70 (11)	67 (9)	53 (5)	51 (2)	25	360 (36)

#### NON-RESPIRATORY.

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	..	..	5	1 (1)	3	..	..	1	3	13 (1)
Females	1	2	..	5	7 (1)	4	1	2	2	24 (1)
Totals..	1	2	5	6 (1)	10 (1)	4	1	3	5	37 (2)

Figures in brackets are 'Transfer In' cases and are included in the totals.

Site	Males	Females	Total
Central nervous system	2	4	6
Abdominal .. ..	..	1	1
Spine .. ..	1	..	1
Bones and joints .. ..	2	2	4
Skin .. ..	..	..	..
Lymphatic system .. ..	3	9	12
Genito-urinary system.. ..	5	6	11
Other sites .. ..	..	2	2
Totals .. ..	13	24	37

**Deaths.**—Deaths from all forms of tuberculosis during the year numbered 41 of which 29 were males and 12 females. In the previous year the total was 50 of which 40 were males and 10 females. Of the total, respiratory tuberculosis accounted for 37 or 90.2 per cent, and non-respiratory 4 or 9.8 per cent. The death-rate from respiratory tuberculosis was 0.07, from non-respiratory 0.01 and from all forms of the disease 0.08 as compared with 0.09, 0.01 and 0.10 respectively for the previous year.



The following table gives details of notifications of and deaths from tuberculosis during the years 1938-1960 :—

### TUBERCULOSIS.

YEAR	DEATHS						NOTIFICATIONS					
	Respiratory tuberculosis		Non-respiratory tuberculosis		All forms tuberculosis		Respiratory tuberculosis		Non-respiratory tuberculosis		All forms tuberculosis	
	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Cases	Case-rate	Cases	Case-rate	Cases	Case-rate
1938	336	0.68	61	0.12	397	0.80	511	1.03	176	0.36	687	1.39
1939	353	0.72	60	0.12	413	0.85	555	1.14	137	0.28	692	1.42
1940	416	0.89	51	0.11	467	1.00	557	1.20	110	0.24	667	1.43
1941	362	0.77	46	0.10	408	0.86	598	1.27	162	0.34	760	1.61
1942	310	0.67	47	0.10	357	0.77	638	1.38	170	0.37	808	1.75
1943	325	0.72	53	0.12	378	0.83	595	1.31	151	0.33	746	1.64
1944	277	0.61	39	0.09	316	0.70	631	1.40	157	0.35	788	1.75
1945	286	0.63	32	0.07	318	0.70	579	1.28	156	0.35	735	1.63
1946	261	0.54	27	0.06	288	0.60	519	1.08	178	0.37	697	1.45
1947	305	0.62	37	0.08	342	0.70	518	1.05	133	0.27	651	1.32
1948	245	0.49	28	0.06	273	0.55	497	0.99	132	0.26	629	1.25
1949	244	0.48	30	0.06	274	0.54	480	0.95	108	0.21	588	1.16
1950	178	0.35	15	0.03	193	0.38	521	1.02	98	0.19	619	1.21
1951	166	0.33	16	0.03	182	0.36	476	0.95	104	0.21	580	1.15
1952	113	0.22	10	0.02	123	0.24	476	0.94	97	0.19	573	1.14
1953	111	0.22	9	0.02	120	0.24	420	0.83	91	0.18	511	1.01
1954	83	0.16	4	0.01	87	0.17	470	0.93	80	0.16	550	1.08
1955	67	0.13	3	0.01	70	0.14	488	0.96	85	0.17	573	1.13
1956	56	0.11	8	0.02	64	0.13	484	0.95	62	0.12	546	1.07
1957	47	0.09	5	0.01	52	0.10	397	0.78	41	0.08	438	0.86
1958	54	0.11	2	0.00	56	0.11	365	0.71	21	0.04	386	0.75
1959	45	0.09	5	0.01	50	0.10	380	0.74	39	0.08	419	0.82
1960	35	0.07	3	0.00	38	0.07	360	0.70	37	0.07	397	0.77

REPORT ON THE WORK OF THE TUBERCULOSIS DEPARTMENT OF THE LEEDS CHEST CLINIC

BY

GORDON F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P.

*Senior Consultant*

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**Epidemiology.**—*General.*—The epidemiological features observed in Leeds bear a close resemblance to those observed nationally. The death-rate from all forms of tuberculosis continues to decline, especially in males; in females, during the year under review, there was a small increase. The mortality rate from tuberculosis is now about one-third of the average over the last ten years. Details of the Tuberculosis Register are shown in Table I, from which it will be seen that the total number of all cases of tuberculosis on the Register has been reduced by 462 during the year under review, a reduction of about 13 per cent. The reduction is due to the removal of 671 cases from the Register as recovered and is an illustration of the results of long-term anti-tuberculous drug chemotherapy which is changing very fundamentally the prognosis of tuberculous disease. The numbers of new cases added to the Register remain fairly constant, whilst the new notifications continue to fall slowly at about the same rate as during the past twenty years. There has been a reduction in notifications of respiratory tuberculosis in males, especially in the over-45 age group, while there has been a slight increase in female notifications in the 25-35 age group. Death and notification rates of 1960, compared with those of 1959, are shown in Table 2.

*Primary Tuberculosis.*—The numbers of new cases of tuberculosis show some variation year by year and there is comparable variability in the incidence of primary tuberculous lesions which continue to make up about 10 per cent. of the total of new cases of respiratory tuberculosis notified. See Table 3.



*Mortality of Tuberculosis.*—From Table 4 it is seen that of the total of 38 tuberculosis deaths during the year, 16 (42 per cent.) were not heard of until the time of death, whilst a further 8 per cent. died in the year of notification. In general, therefore, it would seem that about 50 per cent. of the tuberculosis deaths are related to tuberculosis diagnosed during terminal illness. New cases of tuberculosis which are brought under treatment early have, in general, a much lower mortality rate than the present figure of 0.07 per thousand would suggest. Whilst tuberculosis as a cause of death continues to decline, the death-rate from cancer of the lung remains high and constant and is now accounting for more than ten times the tuberculosis death-rate in Leeds. The death-rate from coronary artery disease continues to increase year by year, whilst during the year under review deaths from bronchitis show a reduction (see Table 5).

**Case-Finding Methods.**—Table 6 shows that, although the number of cases referred to the Chest Clinic has increased, the relative value of the various methods remains reasonably constant year by year. There is still no doubt that the most important and most valuable method of finding new cases of pulmonary tuberculosis is from patients referred by general practitioners for investigation. The importance of the Exclusion X-ray Service is demonstrated in Table 7 and again it is seen that as more cases are referred for X-ray, so do additional cases of tuberculosis come to light.

The results of the Regional Hospital Board Mass X-ray Unit are shown in Table 8, from which it will be seen that the pick-up rate of new cases of tuberculosis in a Mass X-ray Unit is still of the order of 1.0 to 1.5 per thousand cases examined.

**B.C.G. Vaccination and Tuberculin Surveys.**—(i) *Contact Examinations.*—The examinations of contacts of active cases of pulmonary tuberculosis continues to be an important method of finding new cases of unsuspected tuberculosis and, alternatively, of finding those susceptible individuals who may with advantage

be vaccinated with B.C.G. Table 9 shows that about a quarter of contacts examined, irrespective of age, are Mantoux-negative, and that of the cases of active pulmonary tuberculosis discovered in contacts, all are found at their first attendance. This feature has been present in Leeds for several years. Even so, it is still important that the follow-up of contacts of cases of tuberculosis should be maintained for several years.

(ii) *School Leavers*.—Table 10 shows an analysis of the number of tuberculin reactors amongst school children carried out by the School Health Service. Because of the two years' suspension of the scheme as a result of the intensive poliomyelitis vaccination programme, the examinations for tuberculin sensitivity have not been confined to 13-year olds, with a result that a somewhat larger number of children have been examined than in previous years. It is clear that about 80 per cent. of children in Primary, County Secondary and Secondary Modern and Technical Schools are tuberculin negative, whilst in the colleges, which include adolescents of an older age group, the incidence of tuberculin positivity increased to about 50 per cent.

(iii) *University Undergraduates and Staff*.—The result of the annual survey carried out by Dr. R. J. Still and his staff in the University Department of Student Health, with the assistance of the Chest Clinic staff, is shown in Table 11. The features remain much the same as in previous years.

**Health Visitors and Almoners.**—Throughout the year the Almoner and the Health Visitors have continued to provide considerable help and assistance in the management both of patients suffering from tuberculosis and of patients with non-tuberculous chest disease.

Details of the social work of the Tuberculosis Department of the Chest Clinic are given separately.



	Respiratory			Non-Respiratory			Total
	M.	F.	Total	M.	F.	Total	M. & F.
ON REGISTER AT 31.12.59 ..	1,744	1,234	2,978	218	245	463	3,441
ADDED TO REGISTER:							
Cases notified in 1960 ..	190	134	324	12	23	35	359
Transfer-in cases ..	17	19	36	1	1	2	38
Cases returned ..	14	8	22	..	1	1	23
Totals ..	221	161	382	13	25	38	420
TAKEN OFF REGISTER:							
Diagnosis not confirmed ..	6	8	14	..	2	2	16
Re-diagnosed N.R. to R. ..	..	..	..	..	..	..	..
Recovered ..	307	243	550	58	63	121	671
Transferred-out ..	55	29	84	..	..	..	84
Lost sight of ..	23	8	31	5	1	6	37
Deaths from tuberculosis ..	17	8	25	2	1	3	28
Deaths from other causes ..	33	9	42	..	1	1	43
Register Revision ..	1	..	1	..	2	2	3
Totals ..	442	305	747	65	70	135	882
Cases on register at 31.12.59 plus cases added in 1960 ..	1,965	1,395	3,360	231	270	501	3,861
Minus cases taken off 1960 ..	442	305	747	65	70	135	882
Plus N.R. to R. ..	..	..	..	..	..	..	..
CASES ON REGISTER AT 31.12.60.. ..	1,523	1,090	2,613	166	200	366	2,979

(Table 1)

	Nos. of Leeds Resi- dents	Rate per 1,000 popn.	Variation on previous year	"Trans- fers in"	Total	Rate per 1,000 popn.
No. of persons on Clinic Register	2,941	5.71	—459	38	2,979	5.79
New notifications:						
All forms of tuberculosis ..	359	0.70	—19	38	397	0.77
Respiratory tuberculosis ..	324	0.63	—17	36	360	0.70
Non-respiratory tuberculosis	35	0.07	—2	2	37	0.07
Deaths:						
All forms of tuberculosis ..	38	0.07	—12	..	..	0.07
Respiratory tuberculosis ..	35	0.07	—10	..	..	0.07
Non-respiratory tuberculosis	3	0.00	—2	..	..	0.00

(Table 2)

Type of Tuberculosis	1957	1958	1959	1960
Respiratory (Total) .. .. .	334	321	341	324
Primary pulmonary tuberculosis ..	34	19	26	30
Primary pul. tub. as % of total ..	10.2	5.9	7.6	9.3

(Table 3)

No. of tuberculosis cases not heard of until time of death .. .. .	{ Posthumous notifications 4 Registrars' Returns .. 12 }		..	16
No. of deaths within 28 days of notification .. .. .	..	..	..	1
.. .. deaths in other patients notified in 1960 .. .. .	..	..	..	3
.. .. deaths in patients notified before 1960 .. .. .	..	..	..	24

(Table 4)

### PRINCIPAL THORACIC CAUSES OF DEATH

	1956	1958	1960	
			All deaths	Men 45+
Pulmonary tuberculosis ..	56	54	35	23
Cancer of lung .. ..	226	270	266	224
Bronchitis .. .. .	472	430	381	278
Coronary artery disease ..	982	1,075	1,206	672
Pneumonia .. .. .	353	383	359	150
Totals .. .. .	2,089	2,312	2,247	1,347
All accidents (for comparison) .. .. .	180	156	174	48

(Table 5)

Method	No. of new patients so investigated	No. of new cases of pulmonary tuberculosis found	Ratio per 1,000 examinations		
			1960	1959	1958
G.P. Letters .. ..	1,852	84	45	43	47
Exclusion X-ray Service	5,360	70	13	13	9
Routine X-Ray for other purposes .. .. .	309	1	3	5	14
Contact examinations ..	4,165	45	11	6	3
M.M.R. .. .. .	22,380	30	1.3	1.0	1.1
Total .. .. .	34,066	230	6.7	4.9	4.0

(Table 6)

## EXCLUSION X-RAY SERVICE DISCOVERY RATE

	1960	1958	1956
Total attendances ..	5,360	5,077	4,014
New cases of pulmonary tuberculosis ..	70	45	83
Ratio per 1,000 examinations ..	13	9	21

(Table 7)

Age-Groups	Nos. examined		Nos. with presumed inactive pulmonary tub.		Nos. with presumed active pulmonary tub.	
	M.	F.	M.	F.	M.	F.
0-14 ..	↓	↓	..	..	..	..
15-24 ..			3	2	3	4
25-34 ..			2	3	..	2
35-44 ..			7	3	3	3
45-59 ..			8	5	4	1
60+ ..	↓	↓	4	1	4	..
Total by sexes ..	12,809	9,571	24	14	14	10
Grand total ..	22,380		38		24	

(Table 8)

	1959	1960
1. Nos. of contacts examined :	3,825	4,165
(a) No. of new contacts seen ..	1,782	1,963
(b) No. of old contacts seen ..	2,043	2,202
2. Nos. of tuberculin positive contacts :	3,597	3,540
(a) followed-up in Chest Clinic ..	2,939	3,112
(b) followed-up by M.M.R. Unit ..	658	428
3. Nos. of tuberculin negative contacts :	886	1,053
(a) No. given B.C.G. vaccination ..	876	1,037
(b) No. refused B.C.G. vaccination ..	10	16
4. Nos. of cases of pulmonary tuberculosis discovered : ..	10	45
(a) among new contacts seen for first time ..	10	45
(b) among old contacts under review ..	..	..
5. Ratio per 1,000 of new cases of pulmonary tuberculosis discovered :	2.6	10.8
(a) among new contacts ..	5.6	25.2
(b) among total contacts under review ..	2.6	10.8

(Table 9)

## SCHOOL LEAVERS

Type of School ..	No. Examined	No. defaulted	No. tuberculin positive	No. tuberculin negative
Primary .. ..	1,128	83	198 19%	847 81%
County Secondary and Comprehensive ..	4,582	317	818 18%	3,447 82%
Secondary Modern and Technical .. ..	3,009	116	641 21%	2,252 79%
Colleges .. ..	690	34	332 50%	332 50%

Number on roll not now included in S.M.O.'s return.

Because of 2 years suspension of scheme the examinations were not confined to 13-year olds and, as a result, the numbers are greater than in previous years.

(Table 10)

TUBERCULIN SENSITIVITY OF MEMBERS OF THE UNIVERSITY OF  
LEEDS (With acknowledgments to Dr. R. J. Still).

	1960			1959 Total	1958 Total
	Males	Females	Total		
No. tested .. ..	852	287	1,139	1,085	1,255
No. completed testing ..	693	233	926	915	1,050
No. of tuberculin positive ..	425	134	559	482	563
No. of tuberculin negative ..	268	99	367	433	487
No. vaccinated with B.C.G. ..	263	91	355	414	463

(Table 11)

## TUBERCULOSIS—SOCIAL WORK

BY

BARBARA M. R. NORTHROP, M.A.

*Senior Tuberculosis Almoner*

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The most important change in the Almoner's Department during the year has been the absence of a second almoner since February, when the Almoner's assistant was moved to other duties in the Public Health Department. This is the first time in ten years that there has only been one almoner, but the work of the department has continued as before, owing to the decrease in the number of tuberculous patients needing help. This is due to the trend, noted last year, for tuberculous patients to remain at work whenever possible; this has the effect of minimising the problems of their illness.

Patients who cease work to take treatment are now admitted to a chest hospital very rapidly and there is seldom need to lend a bed and bedding to enable the patient to sleep separately and so to avoid infection. However, 6 patients did need the loan of a bedstead and mattress complete with bedding during the year. 2 bedsteads were supplied to patients whose own bedsteads had collapsed and bedsteads and mattresses to 5 other patients who had sufficient bedding for their need but no beds. 16 grants of bedding were made to patients whose own was inadequate or worn out. Gifts of bedsteads, mattresses and bedding from well-wishers enabled outright grants instead of loans to be made in 11 cases.

The need for clothing continued steadily throughout the year and 201 grants were made to patients and their families. Suitable clothing is, of course, essential for patients who should be warmly and adequately clad, especially when they are able to be out and about, but these grants often serve a dual purpose by raising a patient's morale and making him confident that he is neat and presentable when with others. Patients seeking work, sometimes after several months or even years of illness, are helped mentally as well as materially by being enabled to present themselves decently dressed to prospective employers.

Extra nourishment in the form of one pint of milk a day was supplied to 166 patients. During 1960, the Almoner interviewed 1,516 patients and their relatives at the Clinic and 691 applications were made to the Special Services Committee.

**Co-operation with other Departments.**—Once again warm thanks are due to all the statutory departments which have supplied help and advice to Chest Clinic patients.

During the year 34 patients were recommended for a convalescent holiday. For 5 tuberculous patients who were infectious or potentially infectious, convalescence was arranged at Shoreston Hall. We are extremely grateful for the facilities offered by the Home, which provides the only hope of a holiday for infectious patients in this area. 21 other patients were referred to the Convalescence Section; 7 of these were non-tuberculous and the others, tuberculous patients, were non-infectious and able to go to ordinary convalescent homes. One patient living outside Leeds was referred to the appropriate Divisional Medical Officer of the West Riding County Council and the remaining 7 paid to the Leeds Workpeople's Hospital Fund and were referred there for convalescence.

Only 9 patients needed home help this year. This figure is a reflection of the shortened waiting list for treatment in sanatorium. Of the patients who needed help, only one was an active case taking treatment in bed at home and she was not waiting for admission to sanatorium.

The Care of Children Department was approached five times when mothers of young children had to be admitted to sanatorium and had no-one with whom to leave the children. In one similar instance the Maternity and Child Welfare Department was asked to arrange priority admission of a patient's child to a day nursery.

A woman patient had the care of her blind, deaf, elderly and infirm mother. The Blind Welfare Department was asked to arrange for the patient's mother to go to a social gathering once a week so that the patient could have one afternoon for herself.



Two requests were made to the Chief Education Officer on behalf of patients, one for shoes for a patient's children, and one for permission for a child to be admitted to school ahead of his fifth birthday.

The Welfare Services gave help to patients on 13 occasions during 1960. 7 requests for furniture were made when patients were re-housed into Corporation property and were found to have inadequate furnishings for the new house. A patient above the age limit for the normal convalescence scheme was referred for a fortnight's rest and change in a hostel; two infirm patients no longer able to live alone were considered for permanent admission. One woman patient living alone was recommended for a Handicapped Person's Club. A spastic patient with a wheel chair was in difficulties because of the steps leading up to his house and the Welfare Services Department was asked to consider replacing them by a ramp. Another very incapacitated patient had to cease work to look after his young children when his wife left him. Welfare Services kindly arranged to collect his last wage for him and to take clothing to one of his children in hospital.

The National Assistance Board provided help as always in cash and in kind for patients in need. 163 applications were made, 141 of which were for allowances to supplement National Health Insurance Benefit. 35 new patients were referred to the Board and 16 who had not applied previously but who had been attending the Clinic for some time before they came to be in financial difficulties. 12 patients relapsed after a period at work and were helped to apply again for an allowance, as were 24 patients discharged from sanatorium. 16 patients who did not qualify for the special tuberculosis scale of allowance, available to those who cease work to take treatment, were recommended for the ordinary scale of allowance, and a recommendation for a grant for extra nourishment in addition was made in 8 cases. Two elderly patients were assisted to apply for a supplementary pension. 36 referrals were made on miscellaneous grounds, mainly for women patients whose husbands were out of work for various reasons, for patients of both sexes who were themselves temporarily out of work, and for patients starting work and receiving no wages for a fortnight, or starting rehabilitation courses.



The grants in kind comprised bedding, clothing and grants towards the cost of spectacles, home help and removals.

The Ministry of Health was asked to provide an invalid chair for a patient who was unable to walk outside the house owing to his restricted breathing capacity.

Enquiries were made of the Income Tax authorities about the payment of post-war credits for which a patient had applied without result although he appeared to satisfy the conditions. It turned out that he had not applied correctly and an application was made on his behalf.

A patient discharged from sanatorium who needed clothing was referred to the Ministry of National Insurance as he was entitled to a resettlement grant which was being paid to him in weekly instalments. A request was made for an advance from the total sum owing and with this he was able to supply himself with what he needed. Representations were made to the Ministry of National Insurance on another occasion when the mother of a small patient was in great distress because she was asked to repay over £30 to them. It was claimed that Family Allowance had been overpaid to her ten years ago. The matter was taken up with the Ministry and the Almoner was very soon informed that the mother was not required to pay the amount stated; this was a great relief to her, as she was not well herself and the worry was deleterious to her health.

**Voluntary Organisations.**—Under its new name, which was warmly welcomed by patients and staff, the Leeds Chest and Heart Association has continued and extended the work for patients which it did so faithfully as the Leeds Association for the Care of Consumptives. Non-tuberculous chest cases are now eligible for help and, out of 292 grants made in 1960, 27 were to non-tuberculous patients. The Leeds District Aid in Sickness Fund has been the mainstay of the non-tuberculous patients until now and still gives massive help; this Fund, however, can only make *ad hoc* grants and is not able to provide a grocery order or pay fares to hospital, over a long period, and it is a great advantage that patients needing

this sort of regular help can now be referred to the Leeds Chest and Heart Association. Grocery orders, as usual, formed the main bulk of grants made during the year; 205 were granted or continued. Pocket money for patients in sanatorium and fares for their relatives to visit them helped in-patients and payment of convalescent fees enabled some of those at home to get a change of scenery after years spent within the same small area. Patients re-housed in Corporation dwellings were helped with curtaining and linoleum. Grants towards the cost of home help enabled one patient to take treatment in bed at home for several months. The payment of bills for rent and rate arrears, light and heat relieved several patients' minds of severe worries. A new departure this year was the making of grants for the weekly supply of coal, which was a great boon to patients unable to afford the cost of sufficient fuel to heat their dwellings adequately. Clothing was provided for 3 patients and debts on clothing paid for two others. Miscellaneous grants included a carpet, the cost of spectacles, a watch repair, tuition fees for an illiterate patient, an instalment on a gas cooker and a week's board for a patient in lodgings who was without income for a short time until he applied for National Assistance.

Warm thanks are again due to the Leeds Chest and Heart Association for its constant and sympathetic help to patients in need

The helpful grants from the Leeds District Aid in Sickness Fund have also enabled the anxieties of many patients to be lightened. 51 grants were made during the year. The greatest number were for clothing for patients and their relatives; 13 grants were made for this purpose. Debts on clothing clubs and hire purchase were paid in 8 cases and the cost of a convalescent holiday for 7 other patients. Linoleum, curtains, floor stain, carpets and the cost of decorating helped patients moving into new accommodation or making the best of old dwellings. Miscellaneous grants included bedding, cost of removal, a week's rent for a patient removing into a new flat, coal and electricity bills, a meal for a destitute patient awaiting admission to sanatorium the same day and the replacing of money lost by patients whose purses vanished whilst they were out shopping. 21 of the patients who were assisted by the Leeds District Aid in Sickness Fund were non-tuberculous.

The Women's Voluntary Service gave its usual valued help with 16 grants of clothing to patients and relatives and clothing was also obtained from St. George's Crypt for one patient and from the Personal Service League for the children of two other patients. The Hospital Management Committee was asked to provide clothing for two in-patients who could not supply their own.

During the year 12 patients suffering from carcinoma were referred to the National Society of Cancer Relief and every one was assisted with a regular weekly grant for extra nourishment, whilst additional grants for bedding and towards heavy hire purchase debts were made to three patients.

Four Regimental Funds were approached on behalf of two patients who were ex-members of those Regiments. Linoleum and carpeting were provided for a patient re-housed from a furnished attic and debts were paid for another patient. The only other Benevolent Fund to which application was made was the Glasspool Trust but this Fund was unable to help, as it had reached the maximum amount of expenditure allowed by its Trust deed for any one year.

**Work in Sanatoria.**—Only 5 visits were paid to Middleton this year as Leeds chest patients are now no longer admitted to this hospital.

**General.**—The Almoner lectured to groups of health visitor students and student district nurses during the year and also to a class of girls from a comprehensive school who were taking hygiene for the General Certificate of Education and needed information about the tuberculosis services. She spoke to a Women's Institute group and a young men's church group on the work of the Department.

The Almoner's Department was visited during the year by an Area Officer of the National Assistance Board and a Medical Officer of the Canadian Immigration Service. The Almoner attended a meeting of Social Workers at the Leeds Council of Social Service

to hear about the Family Service Unit which has recently been set up in Leeds. She was present at the annual public meeting of "Alcoholics Anonymous", where a challenging talk on alcoholism was given and an interesting film shown.

As Christmas drew near, the needs of patients and their children were again remembered by many well-wishers. The Leeds Work-people's Hospital Fund and the "*Yorkshire Evening Post*" delivered generous gifts of books and toys; the Harehills Lane Methodist Sunday School once again sent gifts from their annual Toy Service, 226 children from 74 families receiving a present. The Leeds Chest and Heart Association supplied a bag of coal to each of 100 patients and the Leeds District Aid in Sickness Fund delivered a welcome parcel of groceries to 13 elderly couples; donations from a patient and an ex-patient enabled two further grocery parcels to be sent out. The grateful thanks of the patients and the Almoner go out to all these good friends of the Clinic who supplied patients with warmth, nourishment and pleasure at Christmas.



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# Disinfestation and Disinfection

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## DISINFESTATION AND DISINFECTION

BY

C. W. LAMB, M.R.S.H., F.R.E.S.,

*Disinfestation Officer*

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The Disinfestation and Disinfection Section of the Department is situated at Stanley Road, Harehills.

The Centre is made up by a number of buildings: an administration block, a building housing high pressure and low pressure disinfection plant with laboratory and offices in one unit, a clinic building for the treatment of pediculosis and scabies conditions, with facilities for the cleansing of neglected cases and containing a lecture room for educational purposes; a large hydrogen cyanide plant, an insecticide store with mixing plant, a modern boilerhouse for the production of steam for sterilisation and heating purposes, and garage accommodation for the twenty vehicles serving the Centre.

The Disinfestation Officer has four Assistant Officers each responsible for his sub-section:—(a) General Disinfestation, (b) General Disinfection, (c) Maintenance and Cleansing of Public Conveniences and (d) Drainage and Public Sewer Flushing.

**Personal Disinfestation.**—This Section, housed in the Clinic block, is supervised by a State Registered Nurse who is assisted by one male and two female attendants. The Clinic Buildings has at one end of it a section for the treatment of *pediculus capitis*. During 1960 1,834 persons were given 1,851 treatments, 1,726 being children of school age and below. In connection with these cases, 1,893 homes were visited, advice given and arrangements made for treatment by the two visitors, both of whom are qualified nurses. Close collaboration was maintained with the School Health Service.

The other end of the Clinic building is designed for the treatment of *pediculus corporis*, *phthirus pubis* and scabies cases. Cases of *pediculus corporis* numbered 389 and by far the greater proportion of these were vagrants. A number of persons coming within the definition of the National Assistance Act, 1948, Section 47, in need

of care and attention and usually in a dirty and verminous condition were cleansed and disinfested before their admission to a Welfare Home or to a hospital. In this instance, close collaboration with the Welfare Services Department enabled the scheme to run smoothly.

During the year 625 persons were treated for scabies, of whom 260 were of school age and under. 326 contacts received prophylactic treatment and a total of 591 homes were visited. These cases are referred for treatment by the Skin Department of the Leeds General Infirmary and by general medical practitioners. There were only 7 cases of *phthirus pubis*.

**General Disinfestation.**—This sub-section is supervised by an assistant officer and has six house disinfestation operators and one hydrogen cyanide operator.

When, in 1934, slum clearance and the consequent removal of slum dwellers to the newly constructed Corporation housing estates brought this city into the limelight in relation to hydrogen cyanide fumigation, the bed-bug infestations encountered were severe and extensive and the costs of disinfestation high. To-day, although the incidence of bug infested houses, prior to vacation, is still high, the infestations are extremely light and the use of hydrogen cyanide fumigation is no longer necessary in this connection. In collaboration with the Housing Department, 1,702 (1,344 in 1959) dwellings were subjected to spray treatment, using a synthetic insecticide in solvent form. Half of this number, i.e. 851 dwellings, were bug-infested slum properties with their contents and the other half Corporation houses sprayed prophylactically to receive the slum dweller. This scheme worked exceptionally well. It speeded up the transfer of tenants from the verminous slum houses to the Corporation houses thus considerably reducing the time the latter stood empty, avoiding loss of rent to the Housing Department. This speeding up was only possible with the co-operation of the Resident Housing Managers of the widely separated estates in the city and the direct contact made with the in-going tenants. All of these were visited, the houses inspected and where found verminous, arrangements were made for disinfestation before removal. In this connection alone, 1,511 (1,158 in 1959) visits were made.

Re-infestation of Corporation houses sprayed during the year to receive verminous tenants does not occur within that period, but 50 Corporation houses not so sprayed during the previous twelve months became infested or re-infested by bed bug, mainly because of the introduction into the house of some second-hand article of furniture or bedding which had been purchased in a verminous condition privately or from some second-hand dealer.

The problem of bed-bug infestation and disinfestation in rehousing is practically non-existent; as already stated, such infestations are light and therefore easily eradicated. Instead, woodworm infestations are considered to be of equal importance. Such infestations are not a matter of public health but they are tremendously important as far as the economics of housing management are concerned. An infestation introduced can soon become widespread with little evidence of its presence in its early stages, and control or eradication is difficult. It is, therefore, now the practice when investigating houses prior to the transfer of the tenant to the Corporation house, to pay attention to the possible presence of woodworm in the structure or, more important, in the furniture of the slum house. Where woodworm is found in the furniture of such tenants, a hydrogen cyanide fumigation process is insisted upon and carried out at the time of removal of the tenant to the Corporation house.

Because of this problem of woodworm disinfestation, the hydrogen cyanide plant, originally created for bed-bug eradication, is retained though reduced to half of its former capacity. Should a woodworm infestation be found on inspection of the slum house and its contents, the latter are removed by means of a container gas van to the Disinfestation Centre. At the Centre the furniture is subjected to hydrogen cyanide fumigation and then delivered to the Corporation house some two days later. Subsequent inspections have proved that the woodworm has been eradicated and the danger of an extension to the structural timber of the Corporation house removed. During the year 198 articles of furniture were fumigated by hydrogen cyanide and 8 removals were carried out in this connection.

Apart from this work of disinfestation in relation to the rehousing process, insect pest control of Corporation dwellings has been maintained. Working in close collaboration with the Clerks of Works of the Housing and Works Departments and the Resident Housing Managers of the various estates, infestations by woodworm, cockroaches, steam-fly, red spider, golden spider beetle, etc., have been controlled and in most instances wiped out completely. Requests for woodworm disinfestation have continued to increase steadily and the first signs of a commencing infestation are usually reported promptly. The latter occur usually on estates which are bounded by woods and plantations. Dead timber in a plantation soon becomes infested and a favourable wind could very easily send an emerging swarm to the adjoining estates of houses, where they enter by open windows, air-grates or by way of the eaves to the roof space. 121 treatments for woodworm were carried out in Corporation houses. Such treatments were arranged to coincide with works of maintenance: infested timbers were replaced by treated timber and easy access to sub-floor and roof spaces was prepared for subsequent spray treatments which are arranged to cover a period of three years, two applications per year, one in March/April and the second in July/August.

The golden spider beetle (*niptus hololeucus*) which received a certain amount of publicity two years ago was found to infest 30 requisitioned Corporation houses, all of which were being converted into flats. Infestations having been discovered as soon as works of conversion had commenced, disinfestation was much easier and by the time the flats were ready for occupation, the infestation had more or less been eradicated.

The red spider or clover mite continues to prove a nuisance especially in the more recently erected Corporation houses. Such infestation is an infestation of the site rather than that of the house, but the protection from the weather and the warmth on the south side that it offers, attracts the mite. Control measures are successful but not immediate.

The window fly (*anisopus fenestralis*) sets a problem in the early part of each year. It is quite content to stay and complete its life-cycle on the filter beds of the sewage works but it readily becomes

wind-borne and is then carried in the wind direction as far as two miles from its normal habitat. Numerous control measures have been tried and experiments continue in the hope that the nuisance can be effectively controlled very soon.

In addition to the regular disinfestation programme carried out for the Housing Department, other Corporation Departments have taken advantage of the facilities offered by the Disinfestation Section. Woodworm control of properties owned by the Waterworks Department in the Washburn Valley has continued. The death-watch beetle is still active at Swinsty Hall; several beetles continue to emerge each year, but with the presence of the insecticidal film on the roof timbers from which they emerge, the beetles die after emergence. There is no evidence of extension of the infestation and as soon as the extensive life-cycle of the beetle is completed, the infestation should come to an end.

Outbreaks of woodworm in school furniture and in the structure of some of the schools, old and new, continue to occur and are dealt with on instructions from the Education Committee. *Lyctus brunneus* (powder post beetle) has been found in recently laid floors of the new schools, but the prompt application of insecticide after removal of the polished surfaces put an end to the infestation, the life-cycle of which rarely exceeds twelve months.

As already mentioned close collaboration with the Welfare Services Department in connection with geriatric cases has been maintained. In addition to the treatment of the aged persons in the Clinic, their homes have to be disinfested. It is usual to empty their contents into gas container vans and, after hydrogen cyanide fumigation, send them on instructions of the Welfare Services Officer to the saleroom for disposal by auction. The verminous dwelling having been cleared is then given a spray treatment before the keys are returned to the owner or his agent.

Both Leeds Hospital Groups and the United Leeds Hospitals continue to entrust their disinfestation programme to the Disinfestation Section. Cockroach, steam-fly and ant control is carried out



at regular intervals and outbreaks of fly infestations, especially at St. James's Hospital, have been investigated. The latter are usually traced to a nearby tip and with the co-operation of the Cleansing Department, steps are taken to prevent further outbreaks by increasing the efficiency of controlled tipping and the application of powder insecticides to the surface of the tip. The disinfestation facilities of the city have also been extended, when applied for, to private firms, property owners and the general public. These works include the disinfestation of verminous bedding, woodworm infested furniture and structures, bug infested dwellings, cockroach and steam-fly infested hotels and restaurant kitchens and control of and precaution against infestation by clothes moths.

Assistance in this field of disinfestation has also been given to neighbouring local authorities. The types of infestations referred to are usually those which required specific treatment and apparatus, but also include bed bug and cockroach disinfestations. One outside authority, Ilkley U.D.C., continues to use the hydrogen cyanide removal process in connection with woodworm infested slum dwellings at Burley-in-Wharfedale. The relative short distance of 14 miles from the Stanley Road Centre enables the proposition to be economic and offers a sound measure against the spread of the infestation into new properties.

Methods of disinfestation vary according to the type and degree of infestation. D.D.T. in kerosene with pyrethrum added remains effective in the field of bed bug infestation. Benzene hexachloride (BHC) in odourless distillate is used in connection with pharoah's ants, steam-fly and other infestations in places where food is prepared or stored and where the absence of smell of the insecticide is of the greatest importance. BHC continues to be very effective against woodworm by its application twice yearly over a period of three years and hydrogen cyanide is an excellent ally in this campaign and in that against moth infested textiles. Xylamon, a German product, has been found excellent in use when dealing with dry rot infestations and with woodworm outbreaks in roof spaces or where the timber is in its rough state. Apart from these, several powders including DDT, BHC and Malathion have their specific uses.



Low pressure steam is used for the disinfection of clothing, bedding and textiles generally, and the Thresh Low Pressure Current Steam Disinfectors answer to this purpose admirably. The volume of work was quite heavy: in connection with the rehousing programme 13,313 articles were disinfected, in connection with occupied Corporation properties 728 articles and for work carried out for other purposes 5,723 articles. No complaint of damage to articles was received during the year, which confirms the efficiency of the machine and pays tribute to the steam operators who handle them.

**General Disinfection.**—This Sub-Section is supervised by an assistant officer in whose charge are four steam operators who manipulate one High Pressure Current Steam Disinfector and two Low Pressure Current Steam Disinfectors. Part-time assistance in this Section is obtained from the male nurse of the Clinic Staff, who supervises the new Package Boiler which came into operation in May. There are also two bedding van personnel, and a general stores vehicle with driver and attendant, who are engaged on departmental transport, including the delivery of stores, etc.

Disinfection carried out during the year has been mainly in connection with cases of tuberculosis, either where a patient has gone to a sanatorium or where he and his family have been rehoused or a death from the disease has occurred. Other disinfections concerned outbreaks of dysentery, and one case of acute anterior poliomyelitis. In connection with the former, several schools required special attention. School toilets were visited twice daily and their appliances thoroughly disinfected until the outbreaks subsided.

Medical Loan Requisites were distributed in collaboration with the Chest Clinic and disinfected after collection and before redistribution. The articles loaned included blankets, sheets, pillow-cases, bedsteads and mattresses. 83 homes were visited, 278 articles delivered involving 531 miles transport.

In connection with infectious diseases, 300 houses were visited, 333 rooms were disinfected by formaldehyde, 243 beds and 22,065 articles were disinfected by steam. For other authorities, 2 houses

were visited, 4 beds and 16 articles disinfected. Packing straw, 818 bales in number, was disinfected by formaldehyde for export purposes as specified by the Board of Trade and the Import Regulations of the countries of destination. This also applied, to a lesser extent, to the sterilization of bristles.

Steam disinfection is confined to one high pressure steam disinfector and is used for bacteriological disinfection of articles which can tolerate the high temperature and pressure. The steam for this purpose is obtained from the new oil-fired boiler plant, completed in May, and which is fully automatic. Constructed by Messrs. Ruston and Hornsby Ltd., of Lincoln, it is of the economic type with single flue and two sets of fire tubes, making it a triple-pass boiler. The boiler is designed for the evaporation of 1,800 lbs. of steam per hour and it has a working pressure of 100 lbs. per sq. in.

Apart from supplying the necessary steam for the H.P. disinfector and the two Low Pressure Current Steam Disinfestors, the steam is also used for providing hot water and heat for space heating of offices, stores, garages, etc.

In the early part of the century disinfection plants were built alongside refuse destructors because of the ready availability of waste heat and its use for the production of steam. To-day, the calorific content of household refuse is so low that it is no longer economically possible to produce steam this way. Because of this factor, the new plant was provided. Producing an average of 26,000 lbs. of steam per week, at an approximate cost of  $\frac{1}{3}$ d. per lb., the new boiler is more economic and requires far less supervision than the waste heat boilers.

For all other purposes, formaldehyde disinfection is used. It is generated by atomising to 4 micron size aerosols, a 30 per cent. strength of formalin from a special aerosol machine. The formalin behaves as a vapour with considerable powers of penetration and the process is eminently suitable for space and surface disinfection. Used in an airtight chamber with a relative humidity of not less than 60 per cent., complete disinfection of articles, not suitable for steam disinfection, is achieved after six hours exposure. Where

formalin has been found to be too severe, propylene glycol has been used for air disinfection. There are no irritating effects from this disinfectant and the room so treated can be used soon afterwards.

Chlorinated phenols, such as Dettol, Ibcot, etc., and white and black disinfectant fluids, the latter to British Standards 2462: 1954, complete a formidable array of disinfectants used at the Centre.

**Transport.**—The distribution of food supplements and stores to Infant Welfare Centres and Day Nurseries was continued during the year. One stores van was maintained for these purposes and completed 9,241 miles.

Under the Medical Requisites Loan Scheme, the Section undertook the collection and delivery of invalid chairs, spinal carriages, mattresses, etc., which are stored at the Centre. During the year, 344 visits involving a total of 2,025 miles were made and each chair and carriage was thoroughly cleansed, disinfected, inspected and repaired, where necessary, before distribution.

With the adaptation of the HCN garage, providing a floor of approximately 120 sq. yds. area, departmental storage difficulties have been overcome and storage space is provided for surplus furniture, from discontinued Day Nurseries, Nurses' Homes, etc., available for re-use, if and when the occasion demands.

**Incontinent Laundry Service.**—During an experimental period of four weeks in October, 1959, four patients suffering from incontinence were visited daily, and four clean draw sheets per patient exchanged for the previous days' soiled linen. In December, 1960 a specially designed laundry van became available and it was possible to extend the service to an average of 19 patients per day. In that month 1,512 sheets were distributed, collected and laundered and the mileage incurred by the vehicle was 1,000 miles.

Taking the year as a whole, approximately 10,636 sheets were distributed, 2,465 visits were made and 9,591 miles travelled.

The laundering was carried out at the South Lodge Laundry by arrangement with the Welfare Services Committee, and included the repair of the sheets. The excellent co-operation of the Laundry Manager ensured a smooth running of the service; not always easy when the number of sheets fluctuated, especially at holiday periods.

**Public Conveniences.**—This Sub-Section is supervised by an assistant officer and there are three squads, each consisting of two men with a motor vehicle carrying equipment for flushing and cleansing the conveniences.

These squads are responsible for the general maintenance and cleanliness of the city's conveniences. There are altogether 74 unattended conveniences for males and females situated in 54 locations throughout the city: 30 of these locations are within a mile and a half radius from the city centre, 13 are between one and a half and two miles and eleven are over two miles from the city centre. The locations of the unattended conveniences comprise 33 for males only, one for females only and 20 for males and females. There are 53 conveniences for males and 21 for females.

Attended conveniences number 5 in the centre of the city, three for males and females, one for males only and one for females only. There is also a convenience for both sexes at Crossgates which is attended for certain hours of the day only.

Cleanliness of the unattended public conveniences is controlled by daily visits made by the three squads. During the year a total of 22,247 visits were paid to the conveniences, both male and female. About 75 per cent. are cleansed each week-day, and, in addition, those situated in the centre of the city are cleansed on Sundays.

The flushing squads report defects and structural damage to the supervising Officer-in-Charge. These reports are checked and the necessary repair work is ordered from the Works Department, a scheme which avoids unnecessary delay in getting repair work executed, an important factor in the satisfactory maintenance of public conveniences. The five attended public conveniences are visited by the Supervising Officer regularly and the same procedure adopted.

At six conveniences major improvements were carried out; new stalls replaced worn and offensive ones and electric lighting was substituted for gas. Thirty-one unattended and two attended conveniences were provided with small wash-hand basins with a spring valve to the cold water tap and it is planned to increase this number during 1961.

Wilful damage in unattended public conveniences must be deplored. No less than £242 12s. 4d. (1959—£44 17s. 8d.) had to be spent to make good the loss by theft of lock boxes, copper and lead piping and by the wanton destruction of urinal stalls, water closet basins and wash-hand basins. Of the 31 small wash-hand basins provided in unattended public conveniences, as already described, eleven of the fireclay basins were so damaged as to require replacement within a short time of fixing, and in two conveniences the basins have been replaced for a second and a third time.

Whereas most of the wanton damage must be attributed to irresponsible youths and to hooliganism, the theft of piping and fittings and of lock boxes is, no doubt, the target for criminal adults. The lock boxes have been, in a number of instances, forced open or entirely removed from the doors and stolen: it is difficult to understand the motive in these cases, as the boxes are emptied daily and contain a few coppers only.

The fitting of these lock boxes of the penny-in-the-slot type has proved to be a deterrent in the past against wilful damage, especially by children, but the cost in repair and in replacement of the damaged and stolen boxes makes their deterrent value almost uneconomic.

The maintenance of automatic electrical switchgear and emergency repairs are done by a squad of two men, trained by the City Lighting Department. Inspections are carried out daily, and this service prevents accidents when lighting fails, especially important when a public convenience is below ground level and reached by a flight of steps. During 19,043 visits paid, 473 lighting repairs were effected.



**Public Sewer Flushing.**—This Sub-Section is supervised by an assistant officer with two squads of drainage flushers, equipped with motor vehicles and necessary appliances such as flushing drain rods, drain plugs, smoke machine and a Mono Sludge Pump mounted on a trailer. These squads work under the direction of public health inspectors in connection with (i) the cleansing of public sewers under the Public Health Act, 1936, Section 23, (ii) the testing of drains in the investigation of unsatisfactory drainage conditions of a building as required under the Public Health Act, 1936, Section 39, (iii) the removal of stoppages from drains and (iv) the pumping out of flooded cellars, inspection chambers, etc.

This service is available to other Corporation Departments, especially to the Housing Department, the City Engineer's Department, the Markets Committee, the Parks and Cemeteries Department, to private contractors and property owners. Contract work for the regular cleansing of drainage systems of private schools, several banks and some of the larger firms has been undertaken. Whereas the cost of cleansing of public sewers is a charge upon the Health Committee, the cost of all other works of cleansing, investigation and pumping has been recovered from the ordering bodies.

The demand for this specialised work is continually increasing; indeed there are some days when the time-tables of the squads are completely booked several days ahead. Because of its nature, some of the work can only be carried out on Sunday mornings or after business hours, therefore some overtime is unavoidable. During the year 1,001 (868 in 1959) public sewers were cleansed and the number of private drains tested and/or cleansed amounted to 34,232 (32,929 in 1959).

By the establishment of this service the Health and Housing Committees have effected a substantial saving in the cost of public sewer cleansing and other drainage investigations; there has also been a saving in time, stoppages having been cleared in most instances the same day that they have been brought to the Section's notice.



DISINFESTATION CENTRE  
REPORT OF WORK DONE FOR YEAR 1960.

## 1. DISINFESTATION

## A. WORK CARRIED OUT AT REQUEST OF HOUSING DEPARTMENT

(a) *Re-Housing*

	Bed bugs	Wood- worm	Others	Total
No. of visits of inspection .. .. 1,511				
No. of dwellings disinfested by insecticide	1,702	8	—	1,710
No. of articles disinfested by steam ..	13,313	—	—	13,313
No. of articles disinfested by HCN ..	—	198	—	198

(b) *General*

No. of visits of inspection .. .. 106				
No. of dwellings disinfested by insecticide	50	121	131	302
No. of articles disinfested by steam ..	528	—	200	728
No. of articles disinfested by HCN ..	—	49	—	49

## B. WORK CARRIED OUT FOR OTHER SOURCES

No. of visits of inspection .. .. 230				
*No. of premises disinfested by insecticides	164	106	622	892
No. of articles disinfested by steam ..	2,317	—	3,406	5,723
No. of articles disinfested by HCN ..	—	330	148	478

\*For Outside Authorities 15      \*For Leeds 877

## 2. TREATMENT OF VERMINOUS PERSONS

	School Age	Others	Total
(a) <i>Pediculus Corporis</i>			
No. of homes visited .. .. .	—	—	8
No. of persons treated .. .. .	12	377	389
(b) <i>Pediculus Capitis</i>			
No. of homes visited .. .. .	—	—	1,893
No. of persons treated .. .. .	1,726	108	1,834
No. of treatments involved .. .. .	1,731	120	1,851
(c) <i>Scabies</i>			
No. of homes visited .. .. .	—	—	591
No. of persons treated .. .. .	260	365	625
No. of contacts treated .. .. .	102	224	326
No. of re-infections .. .. .	16	19	35

(Continued)

## 3. DISINFECTION

	City	Outside Authorities
No. of houses visited .. .. .	300	2
No. of rooms disinfected .. .. .	333	2
No. of beds disinfected .. .. .	243	4
No. of articles disinfected .. .. .	22,065	16
No. of school toilets disinfected .. .. .	—	—
No. of bales of straw disinfected .. .. .	818	—

## 4. PUBLIC CONVENIENCES

	No. of Visits	No. of flushings	
		Drains	W.C.s.
Visits paid for cleansing purposes .. .. .	22,247	34,013	27,279
	Total	Lighting	Repairs
Visits paid for inspection of lighting and emergency repairs .. .. .	19,043	473	—

## 5. PUBLIC SEWERS

No. of public sewers cleansed .. .. .	1,001
No. of private drains tested and cleansed .. .. .	34,232

## 6. TRANSPORT

## (a) Medical Loan Scheme

Visits made for collection and delivery of invalid chairs, spinal carriages etc. .. .. .	344
No. of miles involved .. .. .	2,025

## (b) Chest Clinic

No. of houses visited .. .. .	83
No. of bedsteads, beds, etc, delivered .. .. .	278
No. of miles involved .. .. .	531

## (c) Delivery Service

Miles run for Babies' Welcomes and Day Nurseries in connection with deliveries of stores .. .. .	9,241
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## 7. INCONTINENT LAUNDRY SERVICE

No. of visits paid .. .. .	2,465
No. of miles involved .. .. .	9,591



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# **National Health Service Act 1946**

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- Section 22 CARE OF MOTHERS AND YOUNG CHILDREN**  
**Section 23 MIDWIFERY**  
**Section 24 HEALTH VISITING**  
**Section 25 HOME NURSING**  
**Section 26 VACCINATION AND DIPHTHERIA IMMUNISATION**  
**Section 27 AMBULANCE SERVICE**  
**Section 28 PREVENTION, CARE AND AFTER-CARE**  
**Section 29 DOMESTIC HELP**  
**Section 51 MENTAL HEALTH SERVICES**
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## SECTION 22

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### CARE OF MOTHERS AND YOUNG CHILDREN

BY

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**Maternity and Child Welfare Centres.**—There has been a further slight decrease in the number of expectant mothers attending the ante-natal clinics and the number of children under 5 years attending the infant clinics has also decreased during 1960. Many expectant mothers are now receiving ante-natal care from their own doctors, even when booked for confinement in hospital. The continuity of medical care throughout pregnancy and during the confinement is particularly important when the mother is confined at home. The decrease in the attendances of children at the clinics may be due partly to more preventive work being undertaken by the family doctor. No proprietary brands of dried milk and infant foods have been on sale at the clinics since July, 1959, and this may also have been a factor in reducing the numbers.

The Leeds Health Authority continues to act as a central booking agency for maternity hospitals in the city and this encourages early attendance at the ante-natal clinics where medical supervision of the patient is carried out until the last six weeks of pregnancy. It is an advantage to the mother to be able to attend her local clinic and this also helps to prevent overcrowding of the hospital clinics.

**Welfare Foods.**—National Dried Milk for infants and vitamin preparations for expectant and nursing mothers and children under five years were still supplied at the clinics.

**Educational Work.**—Health education in the clinics by means of demonstration material and visual aids prepared by the health visitors was restarted with the appointment during the year of a health visitor for special duties in Health Education. Dental hygienists have continued to visit the clinics in rotation to advise mothers in the proper care of their own and their childrens' teeth.

Special demonstrations on foot health for children were held at a number of clinics through the courtesy of a firm of manufacturers of children's shoes.

*Leeds Babies' Welfare Association.*—Members have continued to give their regular and valuable help in the clinics as voluntary workers; assisting with routine clerical work, in some clinics undertaking the weighing of children and organising play corners for toddlers, being responsible for the sale of knitting wool, baby clothes and fireguards and at all times helping to maintain a friendly atmosphere in the clinics. Members have also continued in their efforts for "Safety in the Home" and guarding against accidents, particularly burns and scalds of young children. Special effort has been made by the Association to facilitate the purchase of flameproof material for children's garments and to urge mothers to procure this material.

**Ante-Natal Clinics.**—By 31st December, 1960, there were 196 ante-natal sessions held per month at 23 clinics. The number of expectant mothers attending the clinics during the year was 8,684 a decrease of 298; of this total 5,946 were new cases. The total number of attendances at all clinics was 32,133 a decrease of 1,114. In addition to the ante-natal sessions at which the clinic doctor was in attendance, there were 108 sessions per month carried out by municipal midwives.

**Post-Natal Clinics.**—There have been 17 post-natal sessions per month held at 9 clinics. The number of mothers who attended was 779 with the total number of attendances of 914. The majority of mothers now attend the hospital or their private doctor for post-natal examination.

**Infant Clinics.**—There were 28 clinics in operation at the end of the year at which 243 sessions were held per month. The number of infants under one year attending the clinics for the first time was 5,864, a decrease of 76. During the year 3,878 children between one and two years attended and 3,525 children between two and five years, a decrease of 164 and 78 respectively, making the total number



of children attending 13,267 with 78,400 attendances made, a decrease of 318 in the total number of children and a decrease of 7,999 in the total attendances. The number of children on the register at all clinics on 31st December, 1959, was 15,006; with 6,445 new children registered, 6,766 names removed of children who were five years old, had defaulted, died or left the district, the number on 31st December, 1960, was 14,685, a decrease of 321 on the previous year.

**Consultative Infant Clinics.**—The arrangements with the University Department of Paediatrics and Child Health continued and three consultative infant clinics were held each month. The total number of attendances of children under five years was 135.

**Physiotherapy.**—The number of children referred during the year for examination by the Orthopaedic Consultant was 241, a decrease of 41 on the number referred in 1959.

*Artificial Sunlight.*—This was given to 306 children during the year and the total number of attendances at the six infant welfare centres was 4,426. These figures show a decrease of 26 in the number of children attending compared with those for 1959. This would seem to indicate that the number of children attending the infant clinics who required to be referred for sunlight therapy is still decreasing.

*Remedial Exercises.*—A total of 224 children attended for exercises with 2,868 attendances, a decrease of 68 in the number of children in 1959.

*Ante-Natal and Post-Natal Classes.*—These exercise classes for expectant and nursing mothers were held at 6 and latterly at 8 welfare centres. The value of these classes and of the explanatory talks given by the physiotherapist is much appreciated by the mothers who attend. There were 219 mothers who attended ante-natal classes and 4 attended for post-natal exercises. The total number of attendances was 881 and 10 respectively.

**Eye Defects.**—*Children classified as blind or partially blind.*—

There were 4 children under five years and one partially sighted on the register at December, 1959. There were 4 children notified as blind and 2 partially sighted during 1960, making 8 children registered as blind and 3 as partially sighted on 31st December, 1960. Of these, one child is in a Sunshine Home and 10 are in their own homes.

The arrangement has continued for any child under five years attending the infant welfare clinics who is found to have a squint or other eye defect to be referred to the Ophthalmic Consultant at the school clinic, thus providing continuity of supervision and treatment for such cases.

During 1960 the number of children seen by the Consultant for the first time was 148; in addition, 121 children re-attended for further consultation, making a total of 269 children examined. This is an increase of 96 on the number seen in 1959 but a number of these children were deferred from the previous year when no consultant service was available.

**Care of Premature Infants.**—Between 1st January and 31st December, 1960, there were 615 live births notified of infants weighing  $5\frac{1}{2}$  lbs. or less at birth. Of these, 491 were born in hospitals or nursing homes in the city and 124 were born at home. The number of those born at home who were removed to hospital was 42 and the remaining 82 were nursed at home.

The number of infants who died within 24 hours of birth was 56; of these, 50 were born in hospital. Of the 6 born at home, 3 were transferred to hospital and 3 died at home.

Of the 82 infants nursed at home, 60 received special nursing care by the premature baby nurses, with a total of 1,897 home visits.

As well as nursing those infants born at home, the special nurses undertook the after-care of 453 infants requiring further nursing care following discharge from the Leeds Maternity Hospital, St. James's and St. Mary's Hospitals. The total number of home visits to these cases was 4,863.

**Provision for the Care of the Unmarried Mother and Her Child.—**

The arrangements have continued with the three homes in the city run by voluntary organisations to admit Leeds cases recommended by the Health Committee and for which the Committee accept financial responsibility for a period of three to four months. Arrangement was also made for cases which cannot be admitted to these voluntary homes to be taken for a limited period into the Bradford Local Authority Home. In exceptional circumstances, Leeds cases may be admitted to other voluntary homes outside Leeds.

During 1960, admission to these homes were as follows :—

Mother and Baby Home	No. of mothers admitted
Mount Cross Salvation Army Home,	
Leeds .. .. .	24
St. Margaret's Roman Catholic Home,	
Leeds .. .. .	11
Browning House, Church of England	
Home, Leeds .. .. .	17
Bradford Local Authority Home ..	4
	—
Total .. .. .	56
	—

**Convalescence.**—During 1960, 59 mothers and 66 children under five years were referred from the Maternity and Child Welfare Clinics and sent for a period of convalescence.

**Day Nurseries.**—There was still considerable demand for the admission of children to the day nurseries and there was a small waiting list of children for admission to several nurseries. Priority was still given to children according to social or economic circumstances necessitating the mother going to work, or, in a small number of cases, where the mother was dead or had deserted the family. A few special cases were admitted on medical grounds. Except in the special cases mentioned above, no child attended a nursery unless the mother was in regular employment.

The following table gives details of the accommodation and attendances at the day nurseries during the year :—

Nursery	No. of places	Daily Attendance per 5 day week	Total Number of Attendances
Quarry Hill .. ..	50	44·4	11,514
Blenheim Lodge .. ..	50	41·0	10,596
Harehills .. ..	50	46·6	12,082
Hunslet Hall .. ..	50	49·6	12,926
Armley .. ..	55	43·8	11,191
Low Road .. ..	*55	23·1	6,038
Meanwood .. ..	55	38·9	10,062
Burley Park .. ..	75	44·7	11,409
1st Jan. to 30th June..	440	332·1	85,818
1st July to 31st Dec...	420		
% attendance .. ..		77·2 %	

\* Low Road Day Nursery reduced to 35 place nursery 1st July, 1960, and closed 31st December, 1960.

**Adoption Act, 1950.**—The liaison between the Care of Children Department and the Health Department has been maintained. Notice is received of all children under five years placed with a view to adoption through the Children's Officer and the health visitor visits the child in the home of the prospective adopter each month. A report is sent to the Children's Officer on the care and progress of the child.

Medical examination of the children is carried out at the infant welfare clinics or by the private doctor and blood tests are taken prior to the child being placed for adoption.

In this connection 64 mothers and 100 children had blood tests carried out at the Central Clinic. The comparative figures for 1959 were 60 and 64 respectively.

**Nurseries and Child Minders Act, 1948.**—Under this Act applications were received during the year from 18 persons for registration as child minders and 4 additional day nurseries were registered.

The following table shows the number of registered daily minders, the number of registered nurseries and the permitted number of children minded :—

	Child Minders	Nurseries
No. on register at 31st December, 1959	26	9
Permitted No. of children at 31st December, 1959 .. .. .	152	289
No. registered during the year ..	16	4
No. of applications refused .. ..	2	..
No. of registrations cancelled .. ..	4	..
No. on register at 31st December, 1960 ..	38	13
Permitted No. of children at 31st December, 1960 .. .. .	229	469

**Registered Nursing Homes.**—The following table gives particulars of registered nursing homes in the city :—

### REGISTERED NURSING HOMES.

	Maternity		Maternity and General			General		Total		
	No. of Homes	No. of Beds	No. of Homes	No. of Beds		No. of Homes	No. of Beds	No. of Homes	No. of Beds	
				Mat'y	Gen.				Mat'y	Gen.
Existing at 31st Dec., 1959 ..	3	62	..	..	..	5	75	8	62	76
Registration approved during 1960 .. ..	..	† 3	..	..	..	* 1	10	1	3	10
Registration cancelled or surrendered during 1960 ..	..	..	..	..	..	..	..	..	..	..
Existing at 31st Dec., 1960 ..	3	Ø 65	..	..	..	6	86	9	65	86

\* Willow Bank Nursing Home — 10 general beds approved.

† Falloeden Nursing Home — 3 additional maternity beds approved.

Ø Figure includes ante-natal and post-natal beds in two mother and baby homes (Mount Cross and St. Margaret's). Actual number of lying-in maternity beds is 25.



**Nurses Act, 1943—Part II.**—*Agencies for the supply of nurses.*—Under this Act only one nursing agency applied for registration in 1960 and a licence was issued.

**Children Neglected or Ill-Treated in their Homes.**—The Co-ordinating Committee comprised of representatives of the Public Health, Education, Housing, Welfare Services, Probation, Police, Mental Health and Care of Children Departments, inspectors of the N.S.P.C.C. and a representative of the recently established Family Service Unit, has met regularly each month to consider significant cases of children neglected or ill-treated in their own homes. In each case the needs of the family as a whole are considered and agreement reached as to how local services, both statutory and voluntary, can best be applied to meet these needs.

During 1960, 37 new cases involving 126 children were considered and each case referred to the statutory or voluntary body best fitted to deal with the problems. In addition, 9 cases previously notified were re-considered.

The following table shows the number of cases notified and the notifying agencies :—

Notified by	Number of cases					
	1955	1956	1957	1958	1959	1960
Department :						
Probation .. .. .	2	2	..	1	2	2
N.S.P.C.C. .. .. .	4	3	3	2	5	3
Police .. .. .	6	7	1	10	2	9
Health .. .. .	..	6	21	10	12	9
Housing .. .. .	2	2	2	1	2	3
Care of Children .. .. .	1	10	2	4	1	5
Education .. .. .	3	2	1	..	..	2
Welfare Services .. .. .	1	..	1	1	7	..
Miscellaneous .. .. .	..	..	4	4	..	4
Totals .. .. .	19	32	35	33	31	*37

\* Plus 9 cases reconsidered



The following table shows some of the contributory factors affecting the cases considered and emphasises the complexity of the problems confronting the case workers.

PARENTAL FACTORS NOTED IN THE 37 CASES OF NEGLECT  
CONSIDERED DURING 1960.

Case	Broken homes	Incomplete homes	Cohabiting	Low intelligence	Selfish and Indifferent	Shiftless and feckless	Household mis-management	Housing problems	Dirty homes	Abandoned	Ill-treatment	Unwanted child	Ill health (M-Mental)	Total
1	..	1	..	..	1	1	1	..	..	..	..	..	..	4
2	..	1	..	..	1	1	..	..	1	..	..	..	..	4
3	..	..	1	..	1	..	..	..	..	..	..	1	..	3
4	..	..	1	1	..	1	1	..	..	..	..	..	M	3
5	..	1	..	1	1	1	1	..	..	..	..	1	..	4
6	..	..	1	1	1	1	..	..	..	..	..	1	..	5
7	..	..	..	..	..	1	..	..	..	..	..	..	1	2
8	..	..	..	1	..	..	1	..	..	..	..	..	..	2
9	..	..	..	..	..	..	..	1	1	..	..	..	..	2
10	..	..	..	..	..	..	1	1	1	..	..	1	..	3
11	..	..	..	..	..	..	1	1	..	..	..	1	..	3
12	..	1	..	1	1	1	..	..	..	..	..	..	..	3
13	..	1	..	..	1	..	..	..	..	..	..	..	..	2
14	..	..	1	..	1	1	1	..	..	..	1	..	..	2
15	..	..	..	..	1	1	1	..	..	..	..	..	..	4
16	..	..	1	1	1	1	1	..	..	..	1	..	..	3
17	..	..	..	1	..	1	..	1	1	..	..	..	..	4
18	..	1	..	..	1	1	..	1	..	1	..	..	..	4
19	..	1	..	..	1	1	..	..	..	..	1	..	..	4
20	..	..	..	..	..	1	..	..	..	..	..	..	..	1
21	..	1	..	..	..	..	..	1	..	..	..	..	..	2
22	..	..	..	..	..	..	..	1	1	..	..	..	..	2
23	..	1	..	..	1	..	..	..	..	..	..	..	..	2
24	..	1	..	..	1	1	..	..	..	..	..	..	..	3
25	..	1	..	..	..	1	1	..	..	..	..	..	..	3
26	..	..	1	1	..	1	..	..	..	..	..	..	..	3
27	..	..	..	1	1	..	..	..	..	..	..	..	..	1
28	..	1	..	..	1	..	..	..	..	1	..	..	..	3
29	..	..	..	1	..	1	1	..	..	..	..	..	..	3
30	..	..	..	1	..	1	..	..	..	..	..	..	..	2
31	..	1	..	..	..	..	1	..	..	..	..	..	..	2
32	..	1	..	..	1	..	..	1	..	..	..	..	..	2
33	..	..	..	..	..	..	..	1	..	..	..	..	..	1
34	..	..	..	..	..	..	1	1	..	..	..	..	..	1
35	..	..	..	..	1	1	1	..	1	..	..	..	..	4
36	..	..	..	..	..	1	1	..	..	..	..	M	..	3
37	..	..	1	..	..	..	..	1	..	..	..	M	..	3
Totals ..	9	5	7	8	16	18	11	9	6	2	1	3	6	101

**Dental Care of Mothers and Young Children (Report of Mr. D. E. Taylor, L.D.S., Senior Dental Officer).**—The number of sessions spent during the year on dental inspection and treatment of mothers and pre-school children was equivalent to 0.65 dental officers and 0.53 oral hygienists.

The investigation into the dental condition of three-year old children was continued. The inspections and treatment were done at the Central School Clinic by the Senior Dental Officer. The findings for the year were as follows :—

Number examined .. .. .	174
Number free from caries .. ..	99
Number treated by filling .. ..	30
Number treated by extraction ..	28
Number defective but not treated	17
Distortion of the arches due to thumbsucking .. .. .	19
Distortion of the arches due to “ dummy ” sucking .. ..	18
Superior protrusion .. .. .	10
Inferior protrusion .. .. .	4
Excessive overbite .. .. .	7
Cross bite .. .. .	6

Two of the cross bites were in monozygotic twins, the malocclusions being on the opposite sides.

By next year a sufficient number of children will have been examined to make it possible to estimate the prevalence of dental disease and the frequency of malocclusion in the three-year old children in Leeds.

Two cases of *amelogenesis imperfecti* were found.

Plans are now being made to augment the work of the oral hygienists in the field of prevention. A more intensive campaign to educate the public will be started during the coming year.

#### NUMBERS PROVIDED WITH DENTAL CARE

	Number examined	Number found to need treatment	Number treated	Number made dentally fit
Expectant and Nursing Mothers .. .. .	611	607	509	498
Children under 5 years ..	428	268	197	176

## WORK OF DENTAL OFFICERS

	Expectant Mothers	Nursing Mothers
No. of inspection invitations .. ..	966	5
No. of inspection attendances .. ..	606	5
No. found dentally fit .. ..	4	..
No. accepted treatment .. ..	505	4
No. refused treatment .. ..	97	1
Total No. of teeth filled .. ..	262	46
Type of filling given :—		
Synthetic porcelain .. ..	64	6
Cement .. ..	2	..
Amalgam .. ..	54	7
Lined Amalgam .. ..	264	36
Total fillings given .. ..	384	49
Total No. of teeth extracted .. ..	872	367
" " " persons fitted with dentures	118	36
" " " other treatments .. ..	43	27
" " " local anæsthetics .. ..	32	59
" " " general anæsthetics .. ..	155	48
" " " treatment sessions .. ..	262 $\frac{1}{4}$ 30 $\frac{1}{2}$	651
" " " inspection sessions .. ..		
" " " attendances for treatment..	620	127
" " " persons made dentally fit ..	102	127

## WORK OF ORAL HYGIENISTS

	Expectant Mothers	Nursing Mothers
No. of attendances .. ..	551	..
" " scalings .. ..	551	..
" " treatment sessions .. ..	115 $\frac{1}{4}$ 122	..
" " hygiene lecture sessions .. ..		
" " individuals treated .. ..	269	..
" made dentally fit .. ..	269	..

## FORMS OF DENTAL TREATMENT PROVIDED

	Expectant and Nursing Mothers	Children under 5 years
Extractions .. ..	1,239	149
Anæsthetics :—		
Local .. ..	91	..
General .. ..	203	87
Fillings .. ..	304	128
Scalings or scaling and Gum Treatment ..	451	..
Radiographs .. ..	15	..
Dentures provided :—		
Complete .. ..	169	..
Partial .. ..	93	..

## SECTION 23

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### MIDWIFERY

BY

CATHERINE M. GRAY, M.B., Ch.B., D.P.H.,

*Assistant Medical Officer of Health for Maternity and Child Welfare*

AND

DOROTHY HUMPHREYS, S.R.N. S.C.M.,

*Supervisor of Midwives*

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The demand for hospital accommodation for confinement continues to increase. Indeed there is a growing tendency for young mothers to consider that their National Insurance payment entitles them to a maternity bed in hospital.

The number of maternity beds is insufficient to meet this demand and it has been necessary for the hospitals to refuse a considerable number of applications made through the Maternity and Child Welfare clinics. No mother is refused a hospital bed if there is any medical, obstetric or social reason necessitating a hospital confinement. Home circumstances are always investigated and reported on by a midwife before any mother is asked to arrange a home confinement.

In the domiciliary service there is good co-operation between the private doctor and the midwife. The scheme whereby the midwife ensures that the patient has booked a doctor for maternity medical services continues to work satisfactorily. This arrangement prevents the doctor being called in to an emergency knowing nothing of the patient and such a case is now a comparatively rare occurrence. Even when the doctor is himself responsible for the ante-natal supervision of the patient, use is being made of the Local Health Authority clinics, patients being referred for blood tests to be carried out and to take advantage of other facilities such as ante-natal exercise classes, available at the clinics.

**Midwifery Training—Part II.**—The training school at Redcourt Hostel is now well known, as is shown by the number of applicants from Part I training schools in different parts of the country. The fact that the whole of the six months' training is taken in district work is found by the pupil midwives to give them greater experience in normal midwifery and a wider knowledge of social conditions. This is particularly valuable to the midwife who intends to practise district midwifery.

The training course is under the supervision of the midwifery tutor who is superintendent of the training school. There are 27 domiciliary midwives who are approved by the Central Midwives' Board as teachers of pupil midwives; 6 of these were approved during the year. The teacher midwives work in close liaison with the midwifery tutor. They instruct the pupils in their practical work, each midwife being responsible for training one or two pupil midwives.

During the year 37 pupil midwives completed their training. Of these, 36 passed the Part II examination of the Central Midwives' Board at the first attempt and one at the second attempt.

On 31st December, 1960, there were 21 pupil midwives in training.

**Notified Births.**—The total number of notified births of Leeds cases during the year was 9,067. Of these 5,897 or 65 per cent. took place in hospitals or nursing homes and 3,170 or 35 per cent. were domiciliary cases. The comparative figures for 1959 were:—hospital cases 66·6 per cent. and home confinements 33·4 per cent.

The number of domiciliary births notified by midwives was 2,664 or 84 per cent. of the total domiciliary births.

**Notification of Intention to Practise.**—The number of midwives who notified their intention to practise as midwives during the year was 209, of whom 4 left the district and one retired, leaving 204 midwives practising in the city on 31st December, 1960. Of these, 124 were employed in hospitals, 31 in private nursing homes, 2 as private midwives and 47 were employed by the Local Authority.

No midwives notified their intention to practise as maternity nurses during the year. Since 1st July, 1960, when the Midwives (Amendment) Rules, 1960, became operative, no practising midwife is required to notify as a maternity nurse.

**Domiciliary Midwifery Service.**—The average number of midwives employed by the Local Health Authority in domiciliary work throughout the year was 46 full-time. During the year one midwife retired, 5 midwives resigned and 7 new appointments were made. On 31st December, 1960, there were 47 domiciliary midwives, including the four midwives undertaking the nursing care of premature babies. In addition, 3 midwives are employed part-time. The number of domiciliary births attended by municipal midwives during the year was 3,168 or 35 per cent. of the total births notified in the city. The comparative figures for 1959 were 2,860 or 33·2 per cent.

The following table gives comparative figures for the work done by the domiciliary midwives during 1959 and 1960 :—

	1959	1960
Ante-natal visits .. .. .	23,043	24,641
Attendance at birth { As midwife ..	2,429	2,664
{ As maternity nurse ..	431	504
Post-natal visits ... .. .	65,503	51,826
Bookings { As midwife .. .. .	2,302	2,427
{ As maternity nurse .. .. .	764	804
Attendances by patients at midwife's clinics .. .. .	29,375	31,624
No. of patients who had gas/air or Trilene analgesia .. .. .	2,561	2,668
	=89·5%	=84·2%

Of the 51,826 post-natal visits paid by midwives in 1960, 5,499 were to patients discharged home from hospital before the 10th day of the puerperium.

**Analgesia.**—All municipal midwives are qualified to administer Gas/Air and Trilene analgesia and each midwife is provided with



the approved apparatus. Every expectant mother who books the services of a municipal midwife is given the opportunity of having analgesia at her confinement unless her doctor certifies her as medically unfit. Of the 3,168 patients attended at home by municipal midwives, 2,668 or 84·2 per cent. were given either Trilene and/or Gas/Air analgesia. In 63 cases only, Gas/Air analgesia was used.

**Maternity Outfits.**—A sterilised and sealed packet containing all dressings required at the confinement, as specified by the Ministry of Health, is provided by the Local Health Authority for every case attended by a municipal midwife. Outfits are also available for domiciliary confinements attended by private midwives or maternity nurses, and also for Leeds cases in mother and baby homes and two private maternity homes; these may be obtained at the Maternity and Child Welfare clinics. During 1960, 477 outfits were supplied in this way.

**Medical Assistance.**—During the year 855 notifications were received of having called in medical assistance for domiciliary midwifery cases where a doctor was booked for maternity medical services. There were 4 notifications for emergencies under Section 14 of the Midwives Act, 1951, as compared with 19 for the previous year. Only 3 claims for payment for attendance were received from medical practitioners.

**Supervision of Midwives.**—The domiciliary municipal midwives were interviewed each week at the Health Department by the Non-Medical Supervisor of Midwives. She made 283 visits to see the midwives in their homes and at their cases and, in addition, paid 230 special visits.

## SECTION 24

## HEALTH VISITING

BY

CATHERINE M. GRAY, M.B., Ch.B., D.P.H.,

*Assistant Medical Officer of Health for Maternity and Child Welfare*

AND

JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London),

*Superintendent Health Visitor*

The total number of visits paid by the health visitors was 153,914.

The following table gives comparable figures of the work done in 1959 and 1960 :—

	1959	1960
Notified births, and children under 5 years .. .. .	114,777	116,864
Children over 5 years .. .. .	499	601
Stillbirths .. .. .	155	117
Deaths of children under 5 years ..	195	170
Ophthalmia Neonatorum .. ..	*11	*7
Expectant Mothers .. .. .	3,307	3,152
Adoption visits .. .. .	*264	*168
Child Minders .. .. .	*179	*269
Day Nursery admissions and absentees	*87	*59
Tuberculous households .. ..	6,739	6,605
Housing reports .. .. .	703	906
Research Enquiries and adults not classified .. .. .	3,224	3,067
Cases discharged from hospital ..	..	..
Home Help investigations .. ..	27	27
Ineffectual visits .. .. .	20,796	22,405
Total visits for the year .. ..	150,422	153,914

\*included in visits to children under 5 years.

The visiting of mothers and young children has been continued and the total number of visits in this category has increased by over 2,000. The supervision of children under five placed for adoption has ceased to be the responsibility of the Public Health Department and, as a result, there has been a reduction in the number of visits paid. Children placed for adoption have been visited immediately after placing and then selectively in the same way as other children, since September. The number of registered child minders has increased and the number of visits paid to child minders increased to 269 from 179 in 1959. The health visitors have continued to assist with the practical training of medical, health visitor and other students.

Further information regarding the work of the health visitors is given in this Report in the section relating to Health Education and Care and After-Care.

### **HEALTH VISITOR TRAINING**

BY

FLORENCE M. MAWSON, S.R.N., S.C.M., D.N., D.P.A.,

*Health Visitor Tutor*

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At the commencement of the 1959-60 course, 42 candidates had been selected and these were registered at the University on Monday, 5th October. As usual the tutors to the course were in attendance at the Central Court and each student was seen personally and given her programme for the first term.

There were 10 students sponsored by the Leeds City Council, the other 32 being from the usual Local Authorities which have sent students to this course for many years.

**Work of the Course.**—After the inaugural week and the process of settling into a new environment had taken place, the students were ready to take part in the routine of lectures and practical instruction, though guidance is necessary throughout the course to ensure the application of the theoretical to the practical work. It is essential to foster a spirit of service to the community from the start or the importance of the work is not appreciated and much of the teaching becomes meaningless.

**General Arrangement.**—The general arrangement of the course remained the same though there have been some difficulties to overcome occasioned by changes of staff and sickness. The lecture course was maintained due to the combined efforts of existing lecturers and new legislation on Mental Health was included in the syllabus.

**Practical Instruction and Group Visits.**—The basic instruction in the actual responsibilities and techniques of health visiting continued, being followed-up by group discussion and tutorials. A great deal of help has been given this year by the Welfare Services Department in arranging individual visits for the students with District Welfare Officers, Social Workers and teachers of the blind. Homes of the aged, handicapped and blind persons were visited, showing the scope of domiciliary work, this being followed-up by group visits to residential accommodation under Part III of the National Assistance Act and also to the club for the handicapped and the epileptic colony.

**Casework.**—The Council of Social Services very kindly allowed small groups of students to visit and discuss principles of casework and their application with members of the staff, which was felt to be very interesting. These various contacts with social workers of other categories are most valuable in encouraging future co-operation, apart from the very useful knowledge acquired.

**Teaching Practice.**—A knowledge of teaching techniques and the preparation of visual aids is becoming more and more essential to the equipment of a well-trained health visitor as her opportunities for health education are unrivalled. With this in mind each student prepared and delivered several talks in the Department illustrated by teaching materials and all were encouraged to give prepared talks in clinics and schools during practical work sessions.

**Health Society.**—Activities of the Health Society included a party at Christmas, evening discussions, an illustrated talk on travel, the production of the journal and finally the Annual Reunion, all of which were organised by the students.

**Examination Results.**—The examination results were satisfactory, showing 40 passes and 2 failures. The 10 Leeds students passed at the first attempt.

## SECTION 25

## HOME NURSING

BY

KATHLEEN E. WHALLEY, S.R.N., S.C.M.,

*Superintendent Home Nurse*

Once again there was a fall in the number of new cases referred and a decrease in the number of visits.

During the year Miss E. G. Meadows retired from the position of Superintendent Home Nurse which she had held since 1948.

## SOURCES OF CASES 1958-60

	1958	1959	1960
General practitioners .. ..	6,931	6,300	5,268
Hospitals .. ..	2,143	2,492	2,070
Direct application and/or relatives, etc. .. ..	274	68	139
Totals .. ..	9,348	8,860	7,477

## CLASSIFICATION OF CASES, 1958-1960

Classification	1958		1959		1960	
	New Cases	Visits	New Cases	Visits	New Cases	Visits
Medical ..	6,835	219,906	6,270	208,673	5,191	188,981
Surgical ..	1,718	33,114	1,790	35,320	1,635	33,279
Children under 5 years ..	574	5,337	573	5,282	528	4,724
Pneumonia ..	83	903	107	1,155	57	672
Tuberculosis ..	100	5,389	66	3,589	27	1,747
Maternal complications ..	33	252	45	413	36	317
Ophthalmia neonatorum ..	3	23	..	..	1	2
Infectious diseases ..	2	9	9	55	2	12
Totals .. ..	9,348	264,933	8,860	254,487	7,477	229,734

There has been a decrease of 1,383 new patients and 24,753 visits as compared with the previous year. Of the 7,477 patients, 2,907 have received injection treatment of various types, necessitating 108,521 visits.

During the year 3,290 patients aged 65 years and over have been nursed and received 138,846 visits compared with 3,769 patients and 151,392 visits during 1959.

The following tables give the number of patients nursed aged 65 years and over and tuberculous patients nursed :—

		Patients	Visits
1958	.. ..	3,857	152,682
1959	.. ..	3,769	151,392
1960	.. ..	3,290	138,846

		Tuberculous Patients	Patients Nursed Visits
1958	.. ..	100	5,389
1959	.. ..	66	3,589
1960	.. ..	27	1,747

**Staff.**—The nursing staff is as follows :—

		Full-time	Part-time	Staff in terms of full-time
December, 1958	..	57	10	62
„ 1959	..	60	9	64½
„ 1960	..	54	10	59

There are 15 motor cars available for use in the more distant areas of the city.

**Medical Requisites Loan Scheme.**—The arrangements for the loan of sick-room equipment and medical and surgical requisites have been operated from the depot at Market Buildings. During the year 2,966 articles were loaned as compared with 3,387 in the previous year, and 2,771 returned as against 3,230. There were 5,059 applications for extensions of loan periods and 518 persons defaulted with regard to the conditions of loan.



## CLASSIFICATION OF MEDICAL REQUISITES

Articles							Loaned	Returned
Air rings	..	..	..	..	..	..	495	476
Bed pans	..	..	..	..	..	..	731	707
Mackintosh sheets	..	..	..	..	..	..	754	722
Back rests	..	..	..	..	..	..	402	358
Urinals	..	..	..	..	..	..	232	223
Cradles	..	..	..	..	..	..	139	115
Commodes	..	..	..	..	..	..	71	56
Crutches	..	..	..	..	..	..	15	12
Douche outfits	..	..	..	..	..	..	4	6
Spinal carriage	..	..	..	..	..	..	..	1
Rubber bed pans	..	..	..	..	..	..	8	9
Bed trays and tables	..	..	..	..	..	..	2	4
Dunlopillo mattress and cover	..	..	..	..	..	..	6	5
Wheel chairs	..	..	..	..	..	..	48	42
Bedstead with chain and pulley	..	..	..	..	..	..	2	4
Sand bags	..	..	..	..	..	..	2	2
Relaxation chairs	..	..	..	..	..	..	1	2
Bed blocks	..	..	..	..	..	..	4	..
Stand pulleys	..	..	..	..	..	..	11	7
Dietary scales	..	..	..	..	..	..	1	1
Single bed	..	..	..	..	..	..	9	6
Mattress	..	..	..	..	..	..	10	7
Bed with cot sides	..	..	..	..	..	..	2	..
Walking sticks	..	..	..	..	..	..	6	..
Ripple bed on hire	..	..	..	..	..	..	1	..
Hydraulic patient hoists	..	..	..	..	..	..	1	1
Walking aid	..	..	..	..	..	..	1	1
Sputum mugs	..	..	..	..	..	..	4	4
Fracture boards	..	..	..	..	..	..	4	..
Totals .. .. .							2,966	2,771

**Training of Home Nurses.**—In May the application of the Authority for registration for the training of district nurses was approved by the Minister of Health. A Senior Assistant Superintendent (Training) was appointed and the first course commenced in September with ten students, all of whom were existing members of the home nursing staff.

## SECTION 26

## VACCINATION AND IMMUNISATION

BY

ARNOLD SHAW, M.B., B.S.

*Assistant Medical Officer of Health for Immunisation*

For the third year in succession, vaccination against poliomyelitis provided the major part of the work of the Department. Over 109,000 injections against whooping cough, diphtheria, poliomyelitis and smallpox were given during the year. More than 45,000 of these injections were given by the Public Health Department and the remainder by general practitioners.

**Poliomyelitis Vaccination.**—There was a slight increase in the percentage of under-fives vaccinated against poliomyelitis, i.e. 55·8 per cent. as compared with 54·5 per cent. last year. The overall percentage up to the age of 15 was 70·7.

The number of people aged 15 to 25 vaccinated was very low, at less than 4,000. Half of these were vaccinated at evening sessions held at the Central Clinic, although 9 visits were made to factories resulting in the primary vaccination of 262 persons. 1,306 third injections were given at factories. The 15 to 25 age group is apparently uninterested in poliomyelitis vaccination; it seems as though it requires something like the death from poliomyelitis of a nationally known sportsman to stir them from their apathy.

Vaccination is now also available for persons over the age of 40, who may obtain the vaccine on prescription from their family doctor.

## ANTI-POLIOMYELITIS VACCINATION

## PROGRESS OF VACCINATION SCHEME SINCE 1956

Year of Birth	Number of persons vaccinated with 2 injections					
	1956	1957	1958	1959	1960	Total
1920-32 .. ..	..	..	..	..	6,641	6,641
1933-42 .. ..	..	27	1,445	19,738	3,861	25,071
1943 .. ..	..	21	3,063	743	122	3,949
1944 .. ..	..	21	4,379	889	91	5,380
1945 .. ..	..	27	4,155	836	61	5,079
1946 .. ..	..	37	5,419	1,197	74	6,727
1947 .. ..	345	2,573	3,376	1,096	83	7,473
1948 .. ..	339	2,315	2,989	968	95	6,706
1949 .. ..	311	1,980	2,957	872	90	6,210
1950 .. ..	302	1,835	3,002	867	109	6,115
1951 .. ..	216	879	3,899	897	95	5,986
1952 .. ..	53	514	4,067	1,007	125	5,766
1953 .. ..	61	559	2,337	1,653	297	4,907
1954 .. ..	27	431	2,193	1,791	324	4,766
1955 .. ..	..	538	2,224	1,845	314	4,921
1956 .. ..	..	407	2,393	2,058	353	5,211
1957 .. ..	..	7	2,516	2,724	470	5,717
1958 .. ..	..	..	385	4,043	1,023	5,451
1959 .. ..	..	..	..	518	3,445	3,963
1960 .. ..	..	..	..	..	544	544
Expectant mothers ..	..	4	988	2,749	..	3,741
Other groups ..	..	..	405	394	16	815
Totals ..	1,654	12,175	52,192	46,885	*18,233	131,139

\*included in the total for 1960 are 1,110 expectant mothers (now shown in the respective years of birth).

The total for 1960 includes 12,831 by general practitioners. It will be seen that two-thirds of the primary poliomyelitis vaccination work was done by general practitioners. 33,536 third injections were given, including 19,631 by general practitioners.

PERCENTAGES OF CHILDREN IN VARIOUS AGE GROUPS  
VACCINATED AGAINST POLIOMYELITIS

Age (years)	0-4	5-9	10-14	15-19	20-24
Percentage vaccinated..	55.8	73.4	83.2	78.6	70.7

### ISSUE OF PROPHYLACTIC MATERIAL TO PRACTITIONERS

Material	1959	1960
Diphtheria (T.A.F.) .. ..	367 doses	701 doses
Diphtheria (F.T.) .. ..	2,092 "	2,523 "
Combined diphtheria and whooping cough .. ..	2,745 "	1,751 "
Whooping cough vaccine ..	2,346 "	1,688 "
Diphtheria/Tetanus/Pertussis	5,901 "	9,186 "
Combined diphtheria and tetanus .. .. .	339 "	776 "
Combined whooping cough and tetanus .. .. .	36 "	345 "
Polio vaccine .. .. .	60,565 "	53,437 "

**Smallpox Vaccination.**—Numbers of vaccinations and re-vaccinations performed during the year are shown in the following table.

	Under 1 year	1-4 years	5-14 years	15 and over	1960 Total	1959 Total
Vaccinated (a)	1,596	281	21	57	1,955	2,051
Re-vaccinated (b)	2,177	426	67	163	2,833	3,113
(a)	1	9	20	370	400	685
(b)	1	26	89	673	789	869
Totals ..	3,775	742	197	1,263	5,977	6,718

(a) by clinic staff.

(b) by general practitioners.

From the returns of primary vaccinations in infants, it is calculated that approximately 44.4 per cent. of the infant population born between July, 1959, and June, 1960, has been protected.

**Diphtheria Immunisation.**—During the year there was a slight increase in the percentage of children under 5 years immunised against diphtheria. This reflects increased participation by general practitioners in immunisation work. Nevertheless the figure of 59.3

per cent. of this age group immunised can be improved greatly when the Public Health Department reverts to the use of multiple antigens. Next year it is hoped to start using triple antigen which gives diphtheria protection much superior to that given by formol toxoid. Work recently carried out in Leeds under the aegis of the Medical Research Council shows that formol toxoid is a poor antigen which has nowhere near the potency of P.T.A.P. or combined antigen.

This was the first full year in which the poliomyelitis vaccination campaign in schools did not interfere with diphtheria boosting. As a result, it was possible to give over 4,000 diphtheria boosters in schools. It is perhaps significant of the high level of immunisation in Leeds that the press and television reports of outbreaks of diphtheria in Derby, London and Merseyside caused no alarm and very little increase in the number of boosters given as a result of direct application by parents.

The following table shows the extent of diphtheria immunisation work during the year.

Prophylactic	Clinic doctors :—				General Practnrs.	Total
	I.W.C.'s	Schools	Home visits	Mobile Clinics		
Diphtheria only ..	2,230	562	32	33	647	3,504
Diphtheria/Tetanus ..	..	..	..	..	94	94
Diphtheria/Whooping Cough ..	5	..	..	..	653	658
Whooping Cough/Tetanus .. ..	..	..	..	..	35	35
Triple Antigen .. ..	22	..	..	..	2,329	2,351
Whooping Cough only .. ..	2,487	..	6	41	521	3,055
Total protected against Diphtheria	2,257	562	32	33	3,723	6,607
Total protected against Whooping Cough .. ..	2,514	..	6	41	3,538	6,099
Refresher Doses :—						
Diphtheria only ..	91	4,195	..	..	818	5,104
Diphtheria/Tetanus ..	..	..	..	..	37	37
Diphtheria/Whooping Cough ..	..	..	..	..	145	145
Triple Antigen ..	..	..	..	..	348	348
Whooping Cough only .. ..	..	..	..	..	13	13

*Estimates of the Child Population immunised against Diphtheria.*—Estimates of the child population immunised against diphtheria at 31st December, 1960, and in previous years are shown in the following table

Year	Percentage in age group			
	0-4 years	1-4 years	5-14 years	0-14 years
1952 .. ..	72.5	79.3	94.5	86.4
1953 .. ..	70.5	78.0	94.0	85.8
1954 .. ..	67.1	73.3	96.1	86.1
1955 .. ..	65.2	72.2	95.0	85.0
1956 .. ..	64.0	70.6	94.3	84.2
1957 .. ..	61.0	66.9	94.5	83.3
1958 .. ..	59.6	65.0	93.6	82.1
1959 .. ..	58.8	62.7	91.5	80.4
1960 .. ..	59.3	62.8	90.6	79.7

The table on page 95 shows the progress of the diphtheria immunisation scheme since its inception.

*Home Visiting.*—This service is provided for the benefit of mothers who, for good reasons, are unable to bring their children to the clinic. During the year 42 visits were made.

**Whooping Cough Immunisation.**—The following table shows the progress of whooping cough immunisation since 1947. The percentage of children under 5 years protected is rising year by year and at present is approximately 70 per cent.

Year	Number immunised against Whooping Cough	
1947 .. ..	975	
1948 .. ..	908	
1949 .. ..	1,016	
1950 .. ..	1,537	
1951 .. ..	3,801	
1952 .. ..	3,892	
1953 .. ..	4,877	
1954 .. ..	5,276	
1955 .. ..	4,593	
1956 .. ..	5,238	
1957 .. ..	4,894	
1958 .. ..	6,504	
1959 .. ..	6,102	
1960 .. ..	6,099	



**Inoculation for Travellers going Overseas.**—The number and type of inoculations are shown below (for completed courses).

Smallpox vaccination	..	761	
T.A.B.	.. ..	300	(and 12 refreshers)
Cholera	.. ..	252	(and 14 refreshers)
Tetanus	.. ..	59	(and 3 refreshers)
Typhus	.. ..	5	
Yellow Fever (from July)		322	

Yellow fever vaccination was a function of the Hospital Services until July when it was taken over by local authorities. The change was made possible by improved methods of manufacture of the vaccine, making storage possible in ordinary domestic refrigerators. A fee is charged for the service.

**Other Work undertaken by the Department.**—*Research.*—Investigation of the immunising properties of diphtheria formol toxoid continued.

Participation in the Medical Research Council trials of Sabin's oral poliomyelitis vaccine containing live attenuated virus was successfully completed. 22 children took part, each being fed with varying doses of vaccine and each providing blood samples and faecal specimens. We are grateful to the parents of these children for their willing co-operation.

*Examination of Convalescents.*—During the year 590 applicants for convalescence, including 455 children were medically examined.

*Training.*—Lecture-demonstrations on immunisation were given to student health visitors.

**Voluntary Workers.**—We are grateful to the Ladies of the Leeds Babies' Welcome Association for assistance at immunisation clinics.

# DIPHTHERIA IMMUNISATION.

Illustrating the progress of the Immunisation Scheme since its inception.  
Number of Persons in Age Groups, having had Full Course of Injections.

Age at date of Inoculation	1928-1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Total
Under 1 year ..	1,150	24	..	..	..	..	..	788	3,127	3,301	2,561	3,479	3,450	3,143	3,241	2,678	3,077	3,177	3,247	3,669	3,815	Total
1-2 years ..	3,200	941	3,980	3,990	4,412	5,110	5,137	5,304	4,923	3,078	2,931	2,714	2,056	1,757	1,898	1,658	1,857	1,413	1,506	1,277	1,325	under 5 years at end of 1960
2-3 "	2,759	814	2,262	1,024	469	240	777	418	455	438	457	514	391	234	295	247	266	208	211	285	274	23,750
3-4 "	3,105	943	2,053	1,063	463	220	557	327	220	231	249	277	212	137	144	128	142	111	103	135	189	
4-5 "	3,684	865	1,940	1,043	381	257	463	288	260	196	147	193	152	111	146	102	102	70	64	86	130	
5-6 "	4,993	1,563	1,486	1,667	451	359	556	366	323	328	290	263	321	274	270	338	301	288	195	59	150	
6-7 "	5,193	1,450	940	1,622	302	233	467	296	229	286	215	234	320	348	315	393	387	262	194	96	207	Total
7-8 "	4,260	1,174	676	1,482	197	185	392	225	165	143	141	108	144	147	191	217	174	117	99	96	208	5-10 years
8-9 "	3,504	979	466	1,357	164	188	275	163	126	132	95	72	71	109	99	133	101	68	43	35	118	29,896
9-10 "	3,345	926	325	1,271	157	142	259	142	110	119	70	51	65	68	70	82	79	62	34	18	69	
10-11 "	3,562	892	252	1,197	130	152	250	100	90	108	79	64	61	71	63	57	55	41	13	23	40	
11-12 "	3,404	921	205	1,089	109	128	249	113	67	73	60	55	37	31	42	40	26	27	18	9	34	Total
12-13 "	3,372	839	193	1,193	96	109	185	97	80	69	55	40	48	28	26	43	33	6	14	5	19	10-15 years
13-14 "	3,044	704	175	1,035	78	79	138	100	61	55	35	40	48	25	29	24	21	23	12	6	13	37,974
14-15 "	664	74	148	382	8	29	34	13	49	54	31	27	38	23	20	41	29	23	24	11	8	
15 years and over	1,615	65	..	..	55	79	83	43	53	54	48	23	42	4	8	8	10	8	13	10	8	Total 15 years & over 132,953
Age not known	913	34	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Total age not known 958
TOTALS ..	51,767	13,208	15,101	19,415	7,483	7,510	9,822	8,773	10,338	8,665	7,464	8,154	7,456	6,510	6,857	6,189	6,660	5,904	5,808	5,820	6,607	225,511

## SECTION 27

## AMBULANCE SERVICE

BY

J. H. DAYKIN

*Ambulance Officer*

Once again the number of cases carried by the Ambulance Service has risen sharply. This year, however, mileage has risen accordingly. An increase of 15,637 cases were carried over the 1959 figure and 15,040 of these cases were out-patients. Mileage per patient has risen from 3.605 in 1959 to 3.663 in 1960. This may seem an insignificant amount until it is realised that a quarter of a million patients were carried in the year.

## CASES REMOVED IN 1960

Type of Case	Number	Mileage
By Ambulance :—		
Road accidents .. .. .	2,415	} 389,221
Other accidents .. .. .	2,528	
Emergency calls for illness .. .. .	6,015	
Maternity .. .. .	4,297	
Infectious diseases .. .. .	915	
Mental .. .. .	288	
Hospital admissions and discharges .. .. .	17,945	
Special treatment and out-patients .. .. .	36,291	
Others (incl. fruitless journeys).. .. .	5,026	
Total .. .. .	75,720	
By Sitting Case vehicles :—		
Maternity and Child Welfare .. .. .	59	} 535,220
Special treatment and out-patients .. .. .	173,433	
Immunisation .. .. .	1	
Doctors and Midwives .. .. .	2,484	
Others (incl. fruitless journeys).. .. .	665	
Total .. .. .	176,642	
Mortuary Service :—		
Bodies removed .. .. .	782	3,793
Totals .. .. .	253,144	928,234
Hospital Car Pool :—		
Special treatment .. .. .	6,188	32,613
Grand Totals .. .. .	259,332	960,847

In addition to the foregoing, 5,852 cases were removed from Leeds under co-ordination arrangements.

COMPARATIVE TABLE

	1955	1956	1957	1958	1959	1960
Cases :—						
Ambulance ..	68,667	70,000	66,442	68,690	73,460	75,720
S.C. vehicles ..	164,245	164,135	155,015	155,939	163,265	176,642
Total ..	232,912	234,135	221,457	224,629	236,725	252,362
Mileage :—						
Ambulance ..	352,701	355,561	348,715	350,394	366,698	389,221
S.C. vehicles ..	504,117	503,619	483,427	479,757	486,804	535,220
Total ..	856,818	859,180	832,142	830,151	853,502	924,441
Hospital Car Service :—						
Cases ..	14,375	10,017	8,572	5,145	4,671	6,188
Mileage ..	91,502	69,141	59,509	34,490	25,678	32,613

**“ 999 ” Calls.**—A total of 6,784 “ 999 ” calls were answered by the Ambulance Service. Some difficulty was experienced when children were found to be making spurious calls. Prompt action by the G.P.O. and Police has reduced the incidence of false alarms.

**Staff.**—In order to meet the increased demand on the Service, an increase in authorised establishment was obtained. The establishment is now as follows :—

Ambulance Officer .. ..	1
Station Officers .. ..	2
Control Clerks (Male) .. ..	7
Control Clerks (Female) .. ..	2
Radio-telephone Operators .. ..	2
Clerk-Telephonist .. ..	1
Shift Leaders .. ..	5
Driver/Attendants (Male and Female ) ..	109
Mortuary Service Drivers .. ..	2
Mechanics .. ..	2
Semi-skilled hands .. ..	2
Garage attendants .. ..	2
Vehicle washers .. ..	2
Storeman .. ..	1
Cleaners (Female) .. ..	2
Total Staff .. ..	142

**Vehicles.**—A variation in the maximum number of vehicles was also obtained and the following is the position at 31st December, 1960 :—

	Authorised	Held
Ambulances .. .. .	31	27
Sitting-Case Ambulances ..	22	19
Sitting-Case Cars .. ..	8	8
Mortuary Service Vehicles ..	2	2

Four ambulances and three sitting-case ambulances are on order and are expected early in the new year. These will complete the establishment.

The forward-control type of ambulance is proving very useful in confined spaces and crowded streets and it is proposed to standardise on this type of construction. A word should perhaps be said here on the difficulties being experienced by ambulance drivers in attempting to answer calls in the face of the ever-increasing volume of traffic in the city. With the co-operation of the Chief Constable, flashing warning lights were fitted on three new vehicles and tried for three months. The results were eminently satisfactory to all concerned and such lights have now been fitted to all ambulances.

**Accidents.**—There were 54 accidents to Ambulance Service vehicles during the year. This was 12 more than in 1959 and the average of one accident in 17,200 miles is thus lower.

**Equipment.**—Equipment has continued to be maintained in good order and there have been very few losses. New types of resuscitation equipment have been tried out including mouth-to-mouth and suction apparatus fitted inside the vehicles themselves.

A light alloy trolley which is part of the equipment of an ambulance has been developed. The trolley and stretcher together weigh little more than the standard stretcher and obviate unnecessary lifting of patients. It reduces carrying by hand to a minimum and has proved very successful with the staff.

**Buildings.**—Some alterations have been carried out to conform with decisions made by the Health Committee. The kitchen has been dismantled and re-erected in a specially partitioned portion of



the dining-room with access to the common room. This has proved very popular with the staff and is much better. The kitchen has become the long wanted general store and is in process of adjustment. The "up and over" doors to the workshop were completed last year and are serving their purpose admirably. The maintenance staff are warm at their work and their has been less absence through sickness.

A start has been made in the conversion of the lighting system of the Depot. The original tungsten filament type of lighting was costly and wasteful. Strip lighting has been introduced partially and shows great improvement. This form of lighting is much cheaper to run and maintain and some economy should be apparent.

**Vehicle Maintenance.**—The work of restoring and maintaining the fleet continues with good effect. A further three Daimler ambulances and three Morris Commercial sitting-case ambulances have been completely overhauled.

**Civil Defence Training.**—Some progress can be reported in this field. Three members of the Section were trained and qualified as Local Instructors during the year and both Station Officers attended courses of instruction at the Home Office School, Falfield. The Ambulance Officer attended a special course for Chief Ambulance Officers at the Civil Defence Staff College. Further training of volunteers has continued and numerous exercises have been held. The re-organisation of the Section required by Ministry of Health Circular 9/1960 is being studied but difficulty is experienced in finding volunteers of officer calibre.

**Co-operation with other Authorities.**—There has been no difficulty in maintaining the high standard of co-operation between Leeds and other authorities. The Leeds Agreement works well and there has been found no need to call meetings other than at officer level.

**Liaison with Hospitals.**—Whilst liaison has been good, some difficulty has been experienced in meeting the requirements of the hospitals. The establishment of a "Bed Bureau" at St. James's Hospital simplified procedures greatly but the move met with some



difficulties at the outset. Progress through the year has ironed out many of the difficulties, however, and eventually a system was evolved whereby each of the two major hospitals received acute cases on alternate days. This system is still working and appears to do so very well. The acute shortage of beds necessitates many admissions to periphery hospitals and this in turn produces a shortage of ambulance transport.

**Major Accidents.**—A procedure for dealing with major accidents was developed during the year. On 21st December, 1960, a call was received demanding transport for mass casualties arising from a chemical fire at a factory on the city boundary, where 76 persons were suffering from the effects of gas produced by chemical fire extinguishers. All the casualties were removed to three hospitals by ambulance transport and the whole operation was completed in 40 minutes. The operation brought to light minor discrepancies in the Major Accident Scheme which was immediately adjusted.

**Hospital Car Service.**—A slightly greater demand was made upon the Hospital Car Service during the year chiefly because transport was required for aged persons to and from Local Authority chiropody clinics.

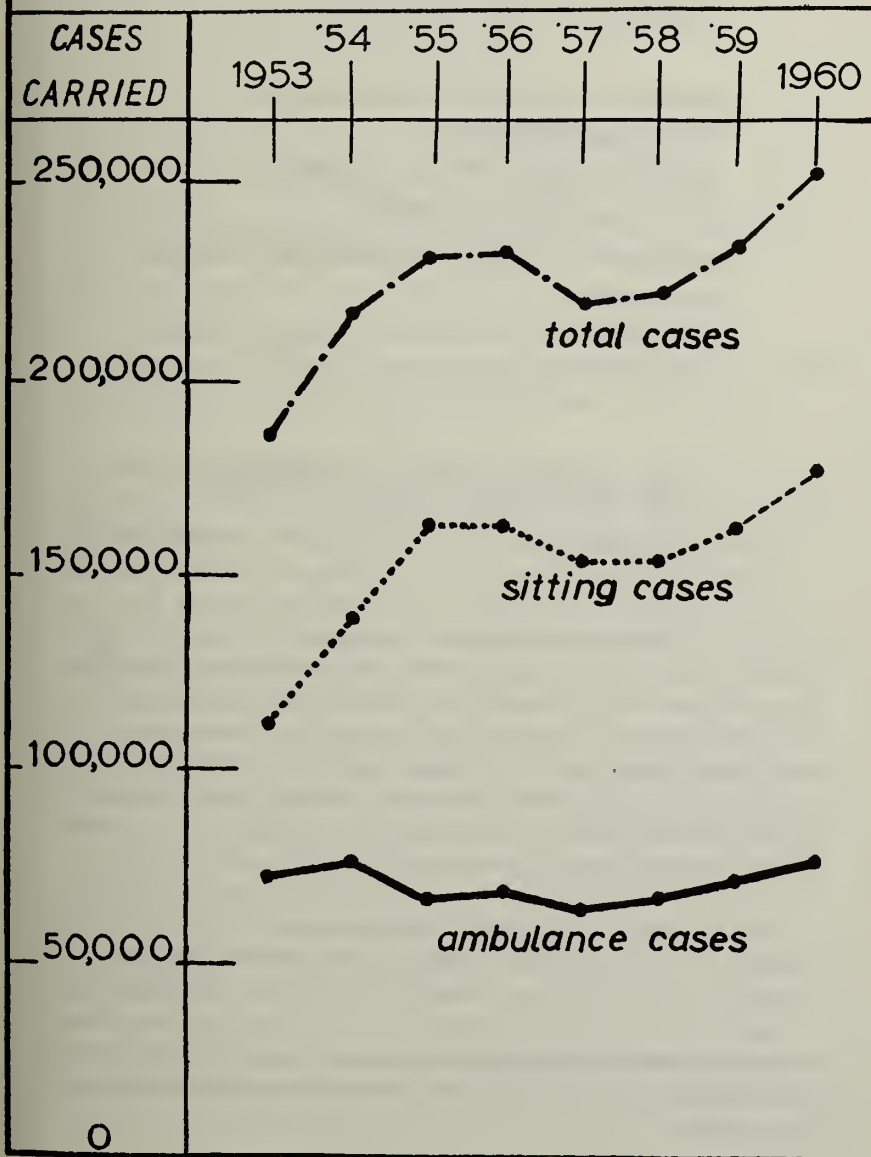
**Competitions.**—A team was again entered in the competition organised by the National Association of Ambulance Officers. On this occasion the team obtained third place in a very close finish. This is very creditable and high hopes are held for 1961.

**Babies Born Before Arrival at Hospital.**—During the year 19 babies were born before arrival at hospital.

**Emergency Midwifery Service.**—In the early part of 1960, an Emergency Midwifery Service was set up whereby relatives of expectant mothers ring the Ambulance Service if the critical period occurs between 6 p.m. and 8 a.m. The staff of the Ambulance Service are provided with a rota of midwives on duty and contact the one nearest to the address of the patient. Transport is provided, if necessary, and reports are submitted to the Maternity and Child Welfare Section. The system works well and now appears to be well established.

CITY OF LEEDS

## AMBULANCE SERVICE



## SECTION 28

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### PREVENTION CARE AND AFTER-CARE

INCLUDING

#### HEALTH EDUCATION AND PUBLICITY

#### VENEREAL DISEASES

#### MEDICAL-SOCIAL WORK (GENERAL)

#### CONVALESCENT TREATMENT

#### CARE AND AFTER CARE (HEALTH VISITING)

#### CHIROPODY

Other aspects are dealt with on pages 38 and 43 (TUBERCULOSIS) and page 131 (MENTAL HEALTH)

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### HEALTH EDUCATION AND PUBLICITY

**Local Activities.**—*Pure Food Centenary Exhibition.*—This exhibition, which was opened by the Lord Mayor in the City Museum on 29th September, was designed to commemorate the first "Act for Preventing the Adulteration of Articles of Food or Drink" passed in 1860, and to demonstrate the progress made during the last 100 years in establishing the purity of food and drugs. The exhibition remained open for ten days and was well attended by the general public and by organised parties of senior children from Leeds Schools; a free film display on a "Pure Food" theme was given each lunch time. A more detailed description of the exhibition can be found in the Report of the City Analyst on page 248.

*Mental Health Week.*—1960 was designated as World Mental Health Year by the World Federation for Mental Health and the week 9th to 16th July as Mental Health Week. The Health and Education Committees and Leeds Group "B" Hospital Management Committee jointly organised a week of open days at training centres, special schools and hospitals together with a public meeting and film show.

*Lectures.*—As in previous years, lecturers were provided to address youth clubs, associations and the like on various health topics. This is a valuable method of health education and the Department is always pleased to assist organisations by providing lecturers.

*Posters, Leaflets, etc.*—Copies of all posters and leaflets issued by the Central Council for Health Education have been received, and where appropriate, have been distributed within the city. Copies of the "Better Health" Journal were distributed monthly to out-patient departments of the hospitals in the city and to the infant welfare clinics. Six former Empire Marketing Board frames have again been utilised for the display of posters.

*Hygiene.*—Publicity material bearing on the clean handling of food was issued to catering establishments in the city.

**National Activities.**—Government sponsored press and poster publicity in relation to diphtheria immunisation and other health subjects has been maintained during the year and Leeds has shared in the benefits.

**The Health Visitors' Part in Health Education.**—Shortage of staff and the lack of a group adviser for health education limited activities during the early part of the year. Talks in clinics were given whenever possible but the number of talks to outside groups was much reduced. In May, health visitors arranged the "Under Five" section of a home safety exhibition organised by the Leeds Home and Child Safety Committee. Five members of the staff presented a one-act playlet entitled "Home Hazards" as the concluding item of the one-day conference which was held in association with the exhibition. In the autumn a Group Adviser for Health Education was appointed and she took up duties on 1st November.

The remaining two months of the year were a time of preparation during which all health visitors in charge of clinics were approached and their needs as regards visual aids, etc. were discussed. With

the assistance of the "Health Education Group", all the demonstration materials in stock were sorted, cleaned and prepared for use. As Christmas was so near, a series of talks on safe and suitable toys was given at infant welfare centres. One talk to a youth club was given in November and preparations were made for a series of talks to youth clubs in the New Year. Eight talks were given during the year to outside groups by members of the health visiting staff. One of the health visitors continued to design posters for the entrance to the Health Department whenever time permitted.

*Lectures to Students.*—Talks and demonstrations to health visitor students on Heaf testing and the testing of young children for deafness were continued. Two health visitors attended the "evaluation sessions" at St. James's Hospital which followed student nurses' visits to homes with midwives, district nurses and health visitors.

The Health Visitor Tutor and the Superintendent Health Visitor gave lectures to student nurses at Leeds General Infirmary and St. James's Hospital respectively as in previous years.

## VENEREAL DISEASES

BY

R. D. CATTERALL, M.R.C.P.,

*Physician in Charge,*

*Department of Venereology,*

*The General Infirmary, Leeds*

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Study of the figures for venereal diseases in 1960 gives no justification for complacency. In recent years, warnings to the medical profession that these diseases were increasing in incidence were given by King (1958)<sup>1</sup> and Nicol (1961)<sup>2</sup>. The numbers of new cases of venereal diseases in England and Wales have continued to grow and the situation in Leeds has closely followed the national pattern.

The total number of new patients attending the clinics is now higher than before the last war. Although many are found to have no evidence of disease, most of them have run a risk of infection. This fact, together with other information, tends to support the impression that sexual promiscuity is widespread. Many patients run frequent risks and may have several infections in one year. In Leeds in 1960, 14 per cent. of the male patients and 27 per cent. of the female patients had more than one attack of gonorrhœa. A small number of patients of both sexes had as many as 4 or 5 infections within the year.

Gonorrhœa in both sexes and non-gonococcal urethritis in men again show important increases. Gonorrhœa occurs more frequently in immigrants and those who are away from their homes. In recent years large numbers of negroes have arrived from the Caribbean area and considerable numbers of them attended the clinics with infections. The majority of these infections are acquired from white women after the immigrants arrive in this country. Out of a total of 1,786 new male patients in 1960, 412 (28 per cent.) were coloured. Of the 600 cases of gonorrhœa in men, 256 (42 per cent.) were coloured men. On the other hand, of the 857 new female patients who first attended the clinic in 1960, only 58 (7 per cent.) were coloured. Of the 200 female cases of gonorrhœa, only 18 (9 per cent.) were coloured patients.



Recent studies have shown that some strains of gonococci have become relatively resistant to penicillin and this can often be correlated with clinical failure to cure the patient with the usual remedies. Many men with gonorrhœa are unable to trace the women who infected them and persuade them to attend for treatment. This fact, plus the asymptomatic nature of gonorrhœa in many women leads to the formation of "reservoirs of infection" of the disease. Some of these women are prostitutes but many are amateurs. Contact tracing by issuing contact slips to all patients is the method employed to try to bring these women up for examination, and recently these methods have been intensified in Leeds with moderately satisfactory results.

The increasing number of teenagers infected with gonorrhœa is disturbing. A survey undertaken in 1957 and 1958 by the British Co-operative Clinical Group in several areas in Great Britain (including Leeds) showed an increase in the age group 18-19 for cases of gonorrhœa of 36.3 per cent. in men and 27 per cent. in girls. The graphs show that the maximum incidence of the disease in women occurred in patients aged 18 and a disquieting number of cases in the age group of 15-17. In men, the maximum incidence was at age 22, although there was an increasing number of cases in the age group 18-21. These facts raise important social and educational questions and should cause all who have responsibility for the care and education of young people to pause for thought.

Cases of non-specific genital infection continued to increase in 1960. The age groups involved were similar to those for gonorrhœa. The serious and chronic complications of these conditions are now more widely recognised. These infections are more easily diagnosed in men than in women. However, in female contacts urethritis, cervicitis or vaginitis may be found, although in a proportion there are no abnormal physical signs. As these conditions behave like infectious diseases, it is likely that many women act as "carriers". It is usual to examine and treat both sexual partners and this accounts for some of the increase in the number of women attending the clinics.

The situation with regard to syphilis is more satisfactory although sporadic cases of early infectious syphilis suggest that the

utmost vigilance is required to detect new cases and trace infectious contacts. Reports of a rise in the number of new cases of primary and secondary syphilis in certain areas of the country confirm the necessity for this attitude. Once again there were no new cases of congenital syphilis in children under one year and this reflects great credit on the ante-natal services of the city.

Sporadic cases of other infectious venereal diseases were seen during 1960 and the increasing availability of air travel necessitates great care that cases of diseases which are usually seen only in tropical climates are not misdiagnosed.

Once again valuable work has been done by our health visitors Miss E. G. Clarkson, Miss I. W. Huggan and Miss K. Nutter in contact tracing and case holding. Miss E. M. Booth continued to give help and advice to many patients as part-time Almoner. The medical and lay staff of the clinic have carried out efficiently and cheerfully the increased work caused by the rise in the number of new patients and the considerable increase in total attendances.

References:—

- <sup>1</sup>. KING, A. J. 1958, *Lancet*, 1, 651.
- <sup>2</sup>. NICOL, C. S. 1961, *Brit. med. J.*, 1, 445.

NEW PATIENTS REGISTERED AT THE VENEREAL DISEASES CLINIC  
AT THE GENERAL INFIRMARY AT LEEDS

	Year 1960		Year 1959		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis .. .. .	41	29	36	34	+5	-5
Yaws .. .. .	3	2	3	..	..	+2
Gonorrhœa .. .. .	600	200	476	162	+124	+38
Non-gonococcal urethritis .. .. .	330	..	271	..	+59	..
Other conditions .. .. .	812	626	607	456	+205	+170
Total .. .. .	1,786	857	1,393	652	+393	+205
Total attendances .. .. .	11,301		8,783		+2,518	
Total No. of In-patient days..	2,918		3,498		-580	

Details of new patients resident in Leeds registered during 1960 are given in the following table:—

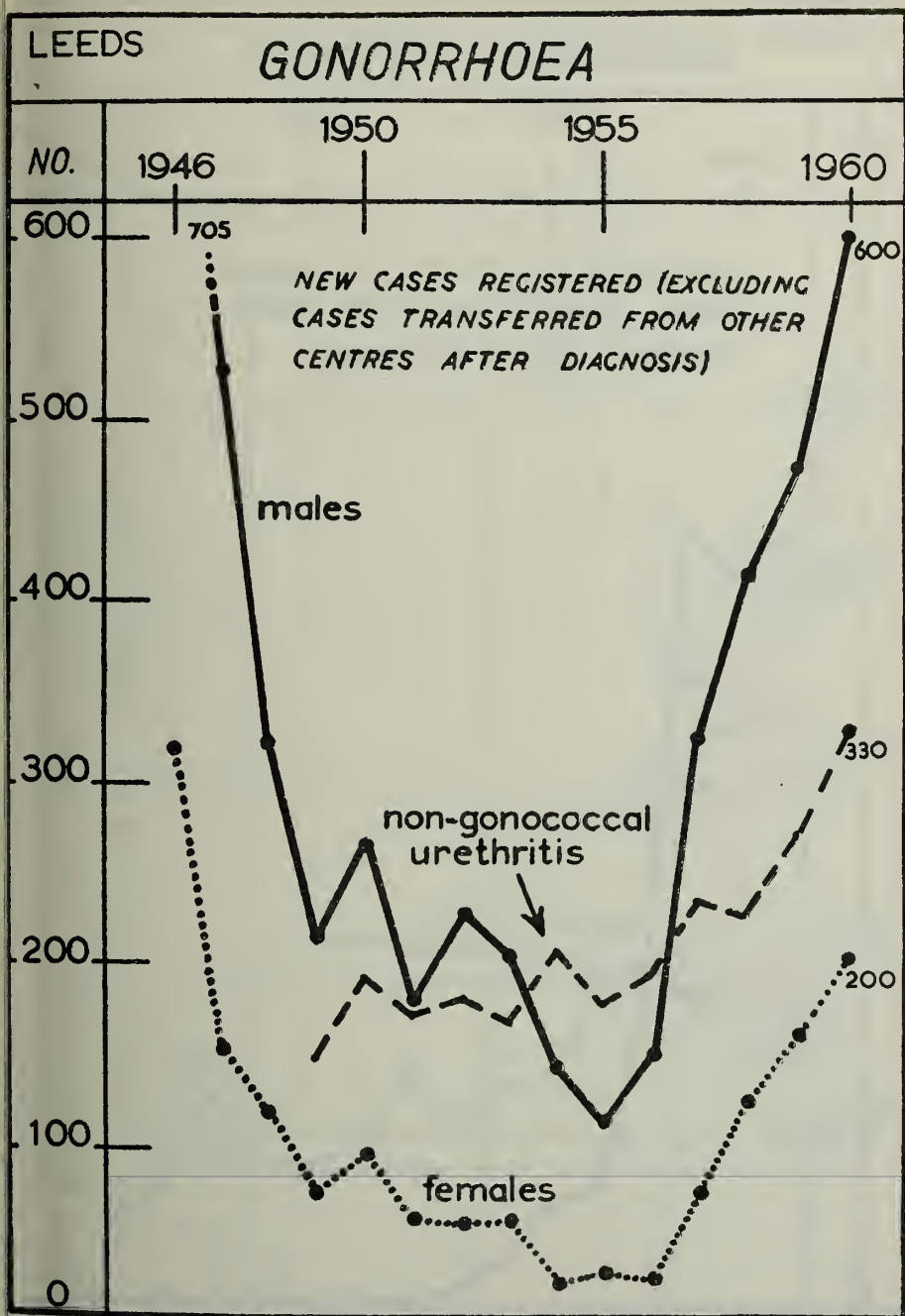
## LEEDS PATIENTS.

	Year 1960		Year 1959		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis, acquired						
Early .. .. .	1	3	..	..	+1	+3
Late .. .. .	25	21	26	19	-1	+2
Syphilis, congenital						
Under 1 year old ..	..	..	..	..	..	..
Over 1 year old ..	..	2	1	9	-1	-7
Yaws .. .. .	3	2	3	..	..	+2
Gonorrhœa .. .. .	531	170	415	128	+116	+42
Non-gonococcal urethritis	256	..	209	..	+47	..
Other conditions ..	601	517	445	382	+156	+135
Total .. .. .	1,417	715	1,099	538	+318	+177
Total attendances ..	9,839		7,163		+2,676	

Patients suffering from a condition for which they have already received attention at a V.D. Centre are excluded from these tables.

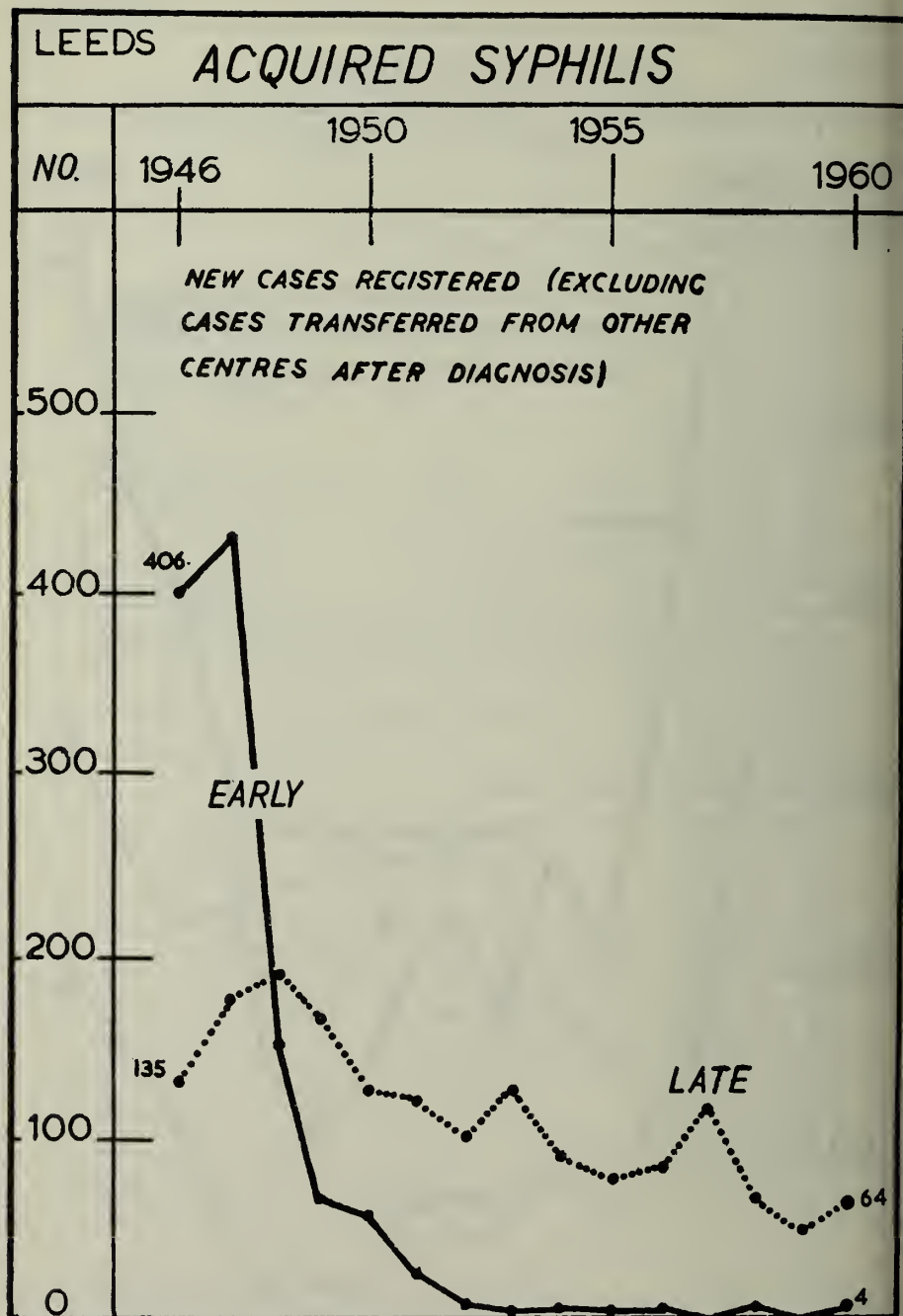
Number of Leeds patients under treatment or observation at 31st December, 1960:—

	Males	Females	Total
Syphilis .. .. .	236	188	424
Yaws .. .. .	12	2	14
Gonorrhœa .. .. .	117	56	173
Non-gonococcal urethritis	79	..	79
Other conditions ..	145	111	256
	589	357	946



GONORRHOEA—Item 12 of Ministry of Health Form V.D. (R)

NON-GONOCOCCAL URETHRITIS—Item 20 of Ministry of Health Form V.D. (R)



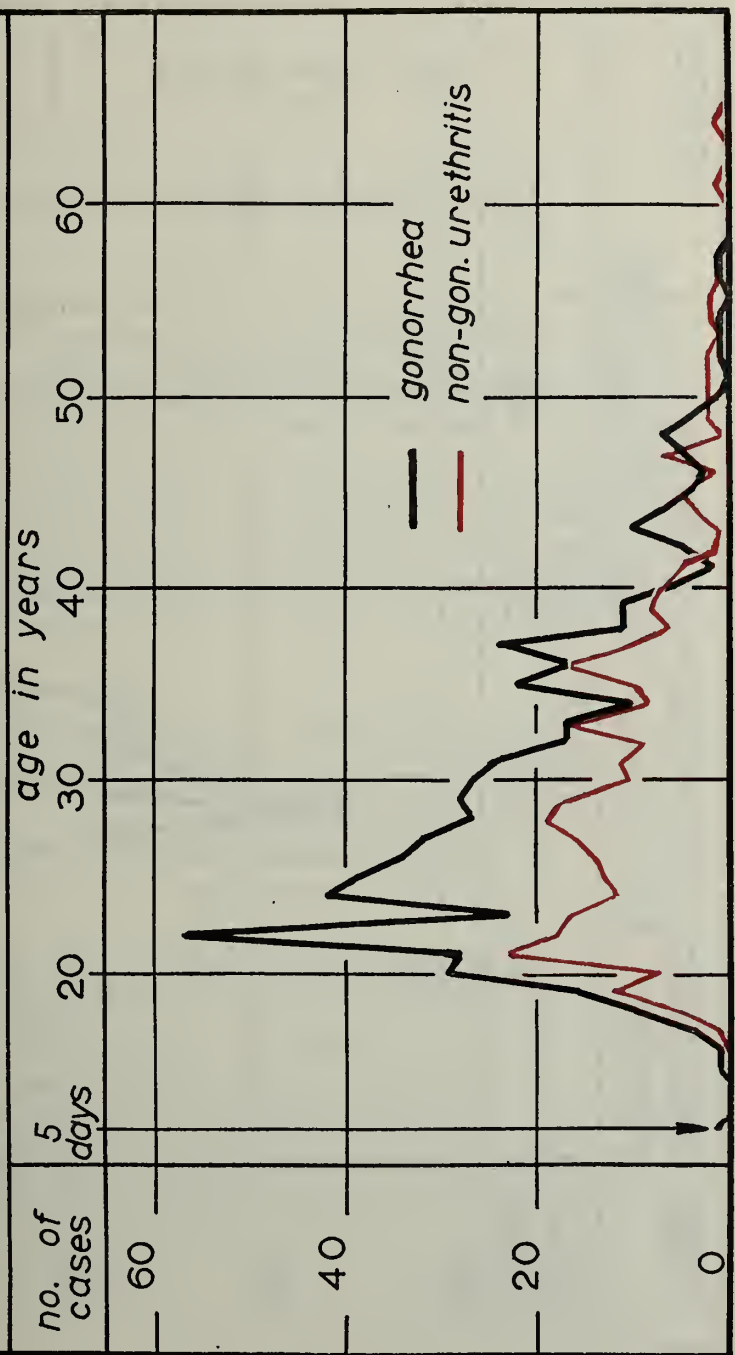
ACQUIRED SYPHILIS—Item 4 of Ministry of Health Form V.D. (R)

"Early" = Primary, secondary and latent in the first year

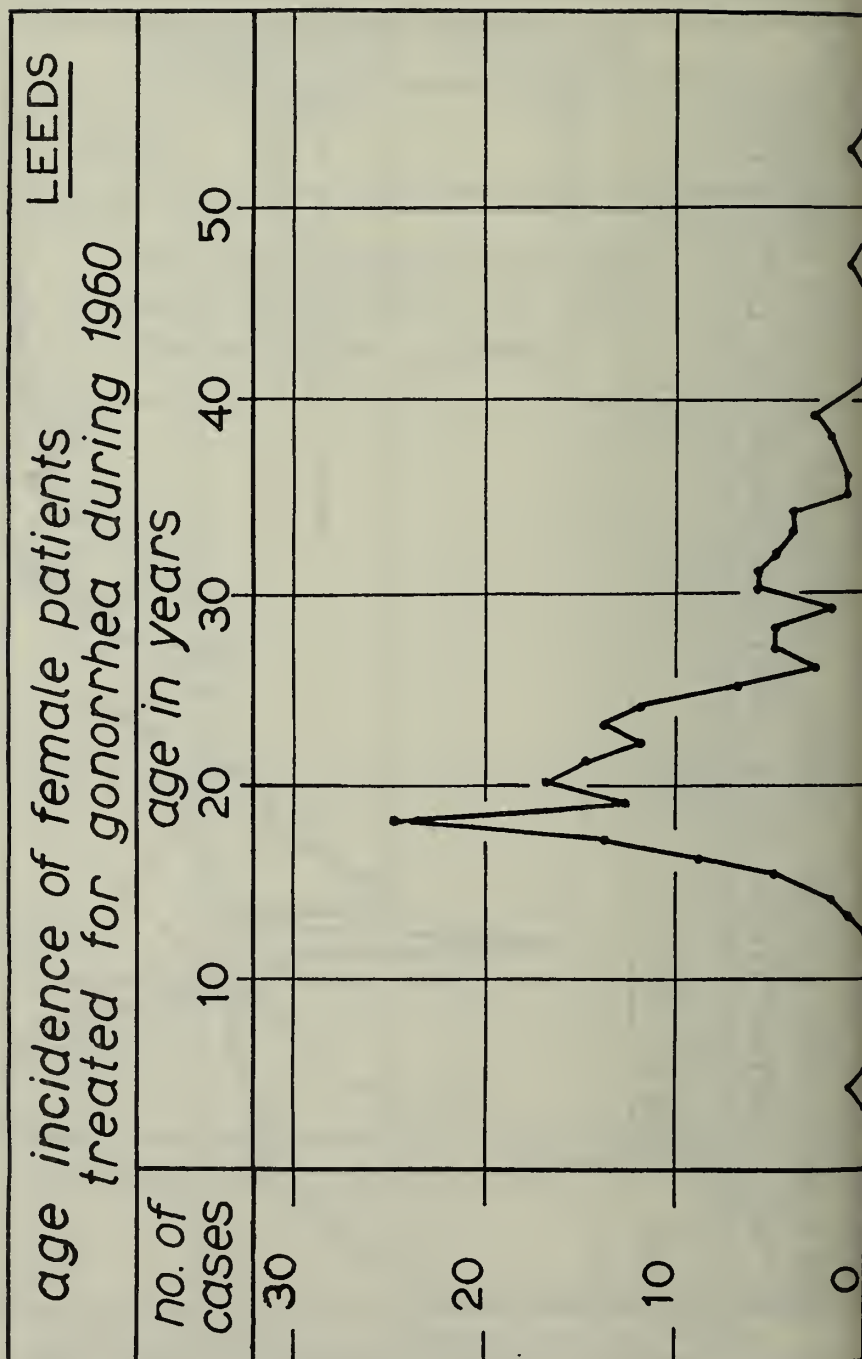
"Late" = All other cases

# age incidence of male patients suffering from gonorrhea and non-gonococcal urethritis

LEEDS  
1960







## MEDICAL SOCIAL WORK (General)

BY

ISOBEL B. PATON  
*Medical Social Worker*

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**Type of Case dealt with.**—During the year 191 cases were referred to the Social Workers by medical practitioners, almoners, National Assistance Board officials, probation officers and other social agencies. Letters to the Medical Officer of Health brought two cases as did requests from City Councillors and Magistrates. Pre-admission visits made for the Chief Geriatric Consultant at St. James's Hospital called for extra visits. Many after-care patients were re-admitted to hospital and referred again for visiting. These are not included in the new cases. Many of the cases required assistance in more than one category but the following table shows only one request per applicant.

Hospital cases :

After-care (geriatric) St. James's Unit ..	43
„ (acute wards) „ „ ..	11
„ Leeds General Infirmary ..	21
„ Royal Bath Hospital, Harrogate	7
„ St. George's Hospital, Rothwell	1
„ St. Mary's Hospital .. ..	1

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84

Visits re patients to be discharged from hospital .. .. .	16
Visits re patients' non-attendance at out-patients clinic .. .. .	10
Visits re patients' admission to hospital ..	6
Housing .. .. .	6
Old people living alone .. .. .	5
Information re Mother and Baby Homes in and around Leeds .. .. .	5
Financial help .. .. .	5

*Continued on next page*

Information re adoption, affiliation orders, etc. . . . .	4
Convalescent treatment . . . . .	4
Loan of single bed . . . . .	4
Visits for Almoners re patients not being visited in hospital . . . . .	3
Requests for clothing . . . . .	3
Visits re patients attending at out-patients clinic . . . . .	3
Visits for Medical Officer of Health . . . . .	2
Visits for Dr. Droller . . . . .	2
Visits re patients' pension books . . . . .	2
Visits re patients taking their own discharge . . . . .	2
Offers of lodging for an unmarried mother and her child . . . . .	2
Miscellaneous cases . . . . .	23
	<hr/>
	191
	<hr/>

**After-Care of Patients discharged from Hospital.**—These patients are visited regularly and the almoners informed as to their progress or otherwise. Their requests for home help, chiropody, spectacles, clothing, bedding, hearing aids, etc. are seen to. Where possible "Meals-on-Wheels" are arranged and information given regarding social clubs.

During the year 1,114 patients awaiting admission to the Geriatric Unit of St. James's Hospital were visited. Patients and their families are advised by their general practitioners that they will be visited and so arrangements are made for someone to be at home when the social worker calls. As well as a social history being obtained for the Geriatric Consultant, it does help to reassure the patient and his family regarding pension books, personal belongings and other items required in hospital. The social worker is able to give advice on National Assistance, the loan of medical requisites and provision of home help.

From the beginning of the year, requests by families for temporary admission of chronic patients to hospital begins; thus families with children and many who have nursed old people are able to plan a holiday. Quite often at this time arrangements are made to spring clean the patient's room. This scheme is greatly appreciated.

During the year 607 visits were paid to new cases, 1,567 to old cases, 145 visits were received from new cases and 61 from old cases; 492 visits were paid to hospitals, the Magistrates' Court and other social agencies in the city. 70 visits were made for the Home Help Assessor.

The Social Workers were invited to attend the National Geriatric Almoners' Group Conference at St. James's Hospital on Saturday, 22nd October. Dr. Droller's talk was on "Liaison with Statutory and Voluntary Organisations".

**Social Care of the Unmarried Mother.**—During 1950, 182 women and girls having an illegitimate child were visited and advised. In 129 cases it was the first child, in 29 the second, in 15 the third, in one case the fourth and in another the fifth. Seven married women having an illegitimate child were referred for help and advice.

Of the 182 cases referred, 43 girls were to be married, 36 intended to return home from hospital and 10 to friends or relations, 9 girls decided to have a home confinement and 9 were returning to live with the putative father (of these four hoped to marry). 17 girls applied for admission to Mount Cross Mother and Baby Home, 7 to Browning House and one to St. Margaret's Home. 4 girls were referred to the Roman Catholic Social Worker and 3 girls to the Church of England Social Worker. 2 girls returned to their homes out of Leeds, one girl went to a home in Huddersfield, 35 girls returned to their lodgings and 5 girls had miscarriages.

All girls attended the Department's Infant Welfare Centre in the district where they resided. Twelve girls were helped to obtain affiliation orders. In some cases the girls were referred to the National Assistance Board where the help of a solicitor was necessary. Several girls had not sufficient evidence to apply for a summons.

*After-Care.*—The after-care of girls who are admitted to a Mother and Baby Home is mostly done by the Matron and staff of the Home. Where possible the Senior Social Worker helps with lodgings for girls who cannot return to their own homes.

**General.**—During the year the Senior Social Worker has attended the monthly meetings of St. Margaret's Committee and Mount Cross Mother and Baby Home. She has attended the Quarterly Meetings of the Leeds Council of Social Service Old People's Welfare Committee and the evening meetings of the Voluntary Workers. When possible she has attended the Epilepsy Association Meetings. Both Social Workers attended the meetings of the Social Workers Club.

The *Yorkshire Evening News* donated 76 Christmas Food Parcels which were taken to house-bound old people. These parcels are greatly appreciated by the recipients, most of whom are ex-patients of the Geriatric Unit at St. James's Hospital.

Thanks are again due to the Editor of the *Yorkshire Evening Post* for toys and to the Women's Voluntary Service for parcels of clothes. The Social Workers would like to thank friends who have donated clothing, furniture, gifts of flowers, food and books; these gifts have all been appreciated and have helped to bring some happiness into the homes of many.

## CONVALESCENT TREATMENT

During 1960, 1,815 applications for convalescent treatment were received and 28 were brought forward from 1959, making a total of 1,843 as compared with 2,065 for the previous year. Of this number, 1,339 patients were sent to convalescent homes, 486 applications were withdrawn and 18 were held over until 1961.

The following table gives details of the number of adults and children sent for convalescence and the number of weeks per patient.

	Adults	Children
Number sent for convalescence ..	845	494
Weeks away .. .. .	1,690	1,100
Extensions (weeks) .. .. .	1	8
Total number of weeks away .. .. .	1,691	1,108
Average number of weeks per stay ..	2	2

A charge of £2 2s. is still being made to each adult person receiving two weeks convalescent treatment.

Provision for the health and comfort of the patients in all the Homes now in use is of a high standard. Alterations have been carried out at two of the Homes during the year, thus enabling the comfort and welfare of the patients to be maintained.

During the year many children and adults have been referred to the W.V.S. for clothing prior to going away for convalescence. Several children have been accommodated for two weeks by the Care of Children Department and the Leeds Children's Holiday Camp Association, to enable tired mothers of large families to have a rest away from home.

During the year 134 mothers, with 147 babies, were sent to the Southport Home. No admissions had to be postponed this year because of infection. In most cases a marked improvement is seen in the health of the mothers on return. The Ambulance Service has continued to provide transport for children and for mothers with babies. W.V.S. escorts have given valuable help with the children.



135 adults and 455 children attended at the Central Clinic for medical inspection prior to admission to convalescent homes.

The allocation of patients to the various homes is shown as follows :—

Home	Adults	Babies	Children	Total
Southport (Mother and Baby Home) ..	173	147	6	326
Blackpool (Horncliffe) .. ..	181	..	11	192
Blackpool (Westwood) .. ..	117	..	14	131
Bridlington (Yorkshire Foresters) .. ..	85	..	4	89
St. Annes (Ormerod) .. ..	..	..	110	110
St. Annes (Blackburn) .. ..	93	..	..	93
St. Annes (Seabright) .. ..	144	..	1	145
Morecambe (Craig) .. ..	..	..	116	116
Southport (Milne) .. ..	34	..	..	34
Grange-over-Sands (Boarbank Hall) .. ..	2	..	..	2
St. Annes (Rochdale Home) .. ..	..	..	85	85
Southport (Jewish Home) .. ..	1	..	..	1
Chathill (Shoreston Hall) .. ..	5	..	..	5
Harrogate (Metcalf Smith) .. ..	10	..	..	10
Totals .. ..	845	147	347	1,339

The following table gives monthly statistics of cases sent for convalescence :—

	Adults	Mothers and Babies		Children	Total
		(M)	(B)		
January ..	19	..	..	15	34
February ..	18	1	1	10	30
March ..	30	6	6	24	66
April ..	79	10	13	31	133
May ..	90	18	18	37	163
June ..	91	16	18	47	172
July ..	126	30	32	37	225
August ..	85	18	20	45	168
September ..	106	17	19	36	178
October ..	48	18	20	43	129
November ..	14	..	..	10	24
December ..	5	..	..	12	17
Total ..	711	134	147	347	1,339

## CARE AND AFTER-CARE (HEALTH VISITING)

BY

JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)

*Superintendent Health Visitor*

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The number of visits to the sick, aged and handicapped and for research purposes (excluding visits to tuberculous households) during 1960 was 4,601. This number was small in comparison with the number of visits paid for other purposes and was approximately 8 per cent. of the total. It is very probable, however, that these visits occupied much more than 8 per cent. of the health visitors' time as they would include a number of special investigations. This type of visit is generally lengthy and may need to be fully reported or followed by telephone calls to several other officers. The number of visits paid in connection with rehousing on medical grounds again increased and was 906 as compared with 703 in 1959 and 538 in 1958.

**Tuberculosis Visiting.**—As in previous years, all newly notified cases were visited and arrangements were made for the examination of contacts. There was a slight reduction in the number of visits paid, which may be a reflection of the slight fall in the number of notifications of new cases. There was no noticeable reduction in the amount of work done amongst the tuberculous as the follow-up of contacts was intensified and close supervision of all active cases was maintained. The total number of visits paid was 6,605 and there were also 1,335 ineffectual visits. During the year 2,253 skin tests were carried out.

**Mental Health.**—Close contact with the psychiatric social worker and the mental health workers was maintained. Health visitors did not take any active part in the after-care of the mentally sick but continued to concentrate on prevention and the early detection of potential patients.

**Venereal Disease.**—Three health visitors continued to undertake part-time venereal disease visiting and this proved to be an increasingly heavy commitment. The number of visits paid during 1960 was 452 as compared with 283 in 1959 and 94 in 1958.

**Special Surveys.**—The Medical Research Council survey, which has been carried out to ascertain the efficacy of B.C.G. vaccination was finally closed in the autumn, after 9 years.

A pilot investigation into the causes of prematurity was begun in August in association with the Department of Obstetrics and the Department of Paediatrics of Leeds University; one health visitor was allocated part-time duties in connection with it.

No other research projects were carried out during the year.

## CHIROPODY

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Proposals by the City Council to operate a chiropody service under Section 28 of the National Health Service Act were submitted to the Minister of Health and received his approval towards the end of 1959. The Health Committee started to operate a chiropody service on 8th February, 1960, treatment being provided at the Central Clinic Annexe, Park Square, and Holbeck Clinic, and, with the co-operation of the Welfare Services Committee, at the Hanover Square Handicapped Persons Centre.

In the first instance one full-time chiropodist was appointed and the first patients were approximately 600 old people who had been receiving treatment under a scheme operated by the Old People's Welfare Committee of the Leeds Council of Social Service. With the help and co-operation of the Council of Social Service the transfer was effected without difficulty and most of the patients accepted the offer of treatment under the Local Authority scheme. It was decided that new patients should be referred by their family doctor and general practitioners were circulated with details of the scheme and supplied with application forms on which to give details of the patient's condition. In accordance with the advice of the Minister of Health treatment was restricted initially to three priority groups, viz. old people, the handicapped and expectant mothers. It was found necessary to provide car transport to clinics in a proportion of cases and for the chiropodist to visit some house-bound patients at home.

A steady flow of applications was received and made the employment of further chiropodists and the equipment of more clinics necessary. By the end of the year two full-time and two part-time chiropodists were providing 30 treatment sessions per week at 6 centres and 4 sessions for home visiting; 1,409 patients were receiving treatment.

The following table gives some details of the patients referred during the year and the treatment being provided at 31st December, 1960 :—

APPLICATIONS RECEIVED :—				
Pensioners referred by Leeds Council of Social Service	..	..	..	596
Pensioners referred by General Practitioners	..	..	..	880
Physically handicapped under pensionable age referred by General Practitioners	..	..	..	30
Expectant mothers referred by Maternity and Child Welfare Doctors	..	..	..	8
Referred by War Pensioners' Welfare	..	..	..	1
				<u>1,515</u>
DISPOSAL :—				
Attending clinics by own means of transport	..	..	..	1,029
" " " transport provided	..	..	..	229
Receiving domiciliary treatment	..	..	..	151
Number awaiting appointment	..	..	..	12
Died or withdrawn	..	..	..	94
				<u>1,515</u>

Chiropody treatment is provided at the following centres :—

Central Clinic Annexe, Park Square, Leeds, 1.

Holbeck Maternity and Child Welfare Clinic,  
Nineveh Road, Leeds, 11.

Welfare Services Centre, 79 Roundhay Road, Leeds, 7.

Leafield Maternity and Child Welfare Clinic,  
King Lane, Leeds, 17.

Middleton Maternity and Child Welfare Clinic,  
Middleton Park Avenue, Leeds, 10.

Balks House Maternity and Child Welfare Clinic,  
Walkers Lane, Dixon Lane, Leeds, 12.

### LIAISON ARRANGEMENTS

(The following information is given in accordance with Ministry of Health Circular 1-61)

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A valuable link with the family doctor and the geriatric hospitals is provided by the two medical-social workers on the staff of the Health Department. Apart from visiting patients referred by general practitioners, hospital almoners and other social agencies, they carry out a pre-admission visit to every patient who is placed on the waiting list for admission to the geriatric unit. It has been found that this visiting discloses a number of patients in whose case admission can be avoided.

The Home Nursing Service works in close co-operation with general practitioners and hospitals and 2,070 of the 7,477 new cases were referred from hospitals. The Incontinent Laundry Service is expected to play a part in the avoidance of unnecessary hospital admissions and "ripple beds" for the treatment of bedsores are now available on loan to patients at home on the recommendation of the geriatric physician. In several cases a recommendation for priority rehousing on medical grounds has been made to the Housing Committee when the geriatric physician has felt that this would avoid hospital admission.

No special arrangement for nursing sick children at home has been made but 4,724 nursing visits were made to children under 5 years of age during the year. The Medical Officer of Health receives reports on all children who are discharged from the Infectious Diseases Hospital and reports are sent to the Senior School Medical Officer in respect of the majority of children of school age who receive in-patient treatment.

**Child Guidance.**—The comprehensive child psychiatry service planned by the Leeds Regional Hospital Board is not yet in existence. Consultative facilities are available at St. James's Hospital but arrangements for the advising of medical and nursing staff of child welfare clinics have not been possible. However, the practice of



the Senior Psychiatric Social Worker visiting one of the Maternity and Child Welfare Clinics to discuss mental health problems with the health visitors has been continued.

**Health Education.**—Until recently, health education activity has consisted largely of the day-to-day efforts of members of the staff who are in contact with the public, in particular health visitors. Apart from individual interviews, talks to groups in clinics were given by the latter and regular teaching has been given at ante-natal clinics. More formal talks have been given to a wide variety of organisations by members of almost every section of the Department. Support has been given to national and local campaigns by poster and leaflet publicity and by special exhibitions.

In 1955 a Health Education Group of health visitors was formed to help with the preparation of visual aids and to help and encourage health visitors to carry out group teaching. The activities of the group have continued since but have been limited by the demands of other aspects of the service.

In the latter part of 1960 a Group Adviser Health Visitor was appointed. She has carried out an assessment of the health education work in clinics and outside the Department, and of the visual aid material; it is hoped that this work can be expanded.

As regards the question of tobacco smoking and lung cancer, it is felt that the connection between these is widely known by the general public and that smoking habits are unlikely to be changed in the face of the widespread advertising campaign of tobacco manufacturers.

Details of specific health education activities during 1960 appear on page 102 in the section of the Report devoted to Prevention, Care and After-Care.



## SECTION 29

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### HOME HELP SERVICE

BY

MRS. DOROTHY W. ALFORD

*Organiser*

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At 31st December, 1960, the Home Help employees numbered:—

Whole-time	..	74
Part-time	.. ..	218
		292
		292

During the year 3,800 applications for help were received. Of these, 2,598 cases received help. 913 applications were withdrawn; reasons for withdrawal were :—(i) death of the patient, (ii) removal of the patient to hospital, (iii) private arrangements having been made for the care of the patient, (iv) cost of the proposed service and (v) emergency over before help could be provided.

The cases which received help are classified as follows :—

Maternity (including expectant mothers) .. .. .	522
Chronic sick, aged and infirm ..	1,331
Others (hospital discharges, emergency illness, etc. .. ..	715
Tuberculosis .. .. .	30
	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/>
	2,598

N.B.—Each case is counted only once, although help may have been provided intermittently from January to December.

The cases helped were brought to the notice of the Home Help Service by the following :—

Blind Welfare Department ..	80	(3·1%)
Welfare Services Department	267	(10·3%)
Hospitals .. .. .	395	(15·2%)
General medical practitioners	436	(16·8%)
District nurses, midwives, etc.	116	(4·5%)
Chest Clinic .. .. .	11	(0·4%)
Mental Health Services, W.V.S., Church workers, National Assistance Board, relatives and members of the public..	1,293	(49·8%)

#### HOURS GIVEN TO CASES HELPED DURING 1960.

MONTH	TYPE OF CASE								Total
	Maternity	Old Age Pensioners	Blind	Emergency Illness	Hospital Discharge	Chronic Sick	Tuberculosis	Nights	
Jan. ..	2,420	14,651	1,545	2,610	3,344	8,109	955	120	33,754
Feb. ..	2,332	12,364	1,328	2,328	3,308	6,820	956	96	29,532
March ..	2,875	15,881	1,835	2,825	3,260	9,181	1,225	145	37,227
April ..	2,196	11,898	1,304	2,072	2,240	6,496	984	64	27,254
May ..	2,816	12,424	1,560	2,316	2,616	7,532	980	..	30,244
June ..	2,616	11,408	1,348	2,216	2,268	6,816	828	..	27,501
July ..	2,805	16,366	1,540	2,510	3,410	8,666	1,190	..	36,487
August ..	900	10,149	1,000	1,752	2,140	5,272	736	76	22,025
Sept. ..	2,100	16,831	1,300	2,780	3,250	8,900	950	55	36,166
Oct. ..	2,216	12,902	1,300	2,124	2,968	7,736	796	60	30,102
Nov. ..	1,956	13,974	1,228	1,868	3,064	7,560	940	100	30,689
Dec. ..	2,835	16,124	1,380	2,020	3,385	8,085	880	95	34,804
Totals ..	28,067	164,972	16,668	27,421	35,253	91,173	11,420	811	375,785

**Chronic Sick, Aged and Infirm.**—The majority of cases helped are long term chronic sick and aged people. Many of the aged people are ambulant but frail, requiring help once or twice weekly. As well as the usual domestic work, the home help undertakes many paid and unpaid services.

Many of the cases are lonely and their depression is lessened by the presence of a home help. In this way, mental as well as physical help is given and many letters of appreciation are received.

As many old people have been rehoused during the period under review, it has been found necessary to clean new houses or flats. Much help has been given in this field and the home helps have shown tolerance and willingness to give that little extra help. They have helped with the sewing of curtains and covers in their own time to make old furniture look good in new surroundings.

It is amazing how many very old people have weathered the winter. The very old are allotted more time than their younger neighbours, so that it is possible to give the little extra comforts and to keep an eye on the fire and food for the forgetful. Over 375 patients receiving help are over 80 years of age and 19 are over 90 years.

The home helps have willingly washed the hair and feet of the aged. So often a bath is needed and the frail ambulant fear bathing alone. The presence of a home help in the room, or in the house, gives the necessary confidence. This part of the service has been much appreciated.

**Maternity Cases.**—These are always welcome. A maternity case refreshes the mind and spirit of the home help. During 1960, 522 maternity cases were helped.

**Emergency Cases.**—As there is often a shortage of hospital beds, many emergency cases are sent home after a very short stay in hospital. Cases involving, for example, broken limbs or burns and needing out-patient care only can be sent home if a home help's care can be guaranteed.

**Mental Health.**—Many patients under the care of the Mental Health Services are receiving help. The cases are difficult and a good, firm but patient woman is needed for these cases.

**Night Care.**—There have not been many calls on this part of the service and all calls have been met.

**Problem Families.**—This is surely the hardest part of the service to cover. However willing a helper may be, this side of the work can be so frustrating. To get order out of chaos is the first objective, then patience and a deep understanding is required to work with inadequate tools and patients of low mentality. The result is rewarding but usually very slow.

**General.**—Much visiting has been undertaken. This is necessary to assess the need, to adjust, lessen or increase the hours required.

There is good liaison between the various statutory and voluntary bodies and cases are discussed and help determined. Cases requiring help have been given to this Section by the Probation Officer and Care of Children officers as well as almoners and social workers.

## SECTION 51

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### MENTAL HEALTH SERVICES

BY

J. M. McALPIN, M.B., Ch.B.,

*Medical Officer of the Mental Health Services*

AND

R. PERRY

*Mental Health Officer*

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### ADMINISTRATION

The service is administered by a Mental Health Sub-Committee consisting of twelve elected representatives and three co-opted members having experience of the work. Meetings are held monthly.

Following the retirement of the Executive Officer, Mr. J. Squire Hoyle, in January, certain changes were introduced in the administrative structure of the Department in order to bring about closer integration with the main body of the Health Department. The post of Executive Officer was abolished and the bulk of the administrative and clerical work of the Department was transferred to the administrative section of the Health Department at 25, East Parade.

1. **Mental Deficiency (Subnormality)** (*Ascertainment, community care and training, sheltered employment and vocational guidance*).—The junior and senior training centres, as the occupation centres are now termed, and the sheltered workshops are described in subsequent paragraphs. The implementation of the Mental Health Act, 1959, on 1st November resulted in administrative changes but made no significant change in the volume of work or the extent of services provided. It was considered that the number of places at the training centres and the number of welfare staff were adequate. Three Mental Welfare Officers devote the greater part of their time to the community care of the mentally subnormal.

The Department is grateful to the School Medical Service for their continued co-operation, and to the Regional Hospital Board's consultants for assistance with diagnostic problems and their readiness to admit suitable cases to their hospitals when the state of the waiting list permits. The Department is also indebted to the Ministry of Labour for the services of the Disablement Resettlement Officers in placing suitable cases in employment.

Informal admission to hospital of the mentally subnormal and severely subnormal has been the method of choice for some time. After 1st November, 1960, compulsory admission procedures require two medical recommendations, one of which must be given by a doctor approved for the purpose under Section 28(2) of the Act. A list of doctors so approved has been prepared.

2. **Mental Illness** (*Removal of the acute case to hospital under Section 20 of the Lunacy Act, 1890, as modified by the Mental Health Act, 1959; After-care of patients discharged from mental hospitals including residential care in hostels; preventive services*).—Three mental welfare officers with special experience in the work were employed mainly as Duly Authorised Officers, with part-time assistance from a fourth. With effect from 1st November (the appointed day) they ceased to function as Duly Authorised Officers with personal responsibility in deciding whether or not a particular patient should be admitted. Admission is now a medical matter, but it is clear that the experience and long familiarity with this particular problem which these officers have gained is still of great value to the psychiatrist dealing with the acute case. For the initial period at least, it would seem desirable that they should devote the greater part of their time to this particular duty. The removal of the acute psychiatric patient to hospital in a tactful and expeditious manner, with a minimum of distress to the patient and his relatives is one of our essential services, and has great "public relations" value.

The Psychiatric Social Worker and four Mental Welfare Officers carry out after-care of patients discharged from mental hospitals, and undertake the social work of the Psychiatric Unit at St. James's Hospital, being seconded to the Unit for this purpose.



The Psychiatric Social Worker undertakes general supervision of the residents in the Rutland Lodge Hostel for post-psychotic patients opened on 31st October, 1960. The Psychiatric Social Worker and Mental Welfare Officers take part in the general preventive and educational services of the Department.

3. **Training and Education.**— There has been no change in the Department's policy of training staff within the Department. As in previous years places were made available at the senior and junior training centres for students of the National Association for Mental Health course for teachers of the mentally handicapped. Social science students from Leeds University and the London School of Economics were attached to the Department for practical work. The usual lectures were given to medical and social science students, student health visitors and home nurses.

Full advantage was taken of the public interest aroused by Mental Health Year programmes on television and in the press. Open days were held at the training centres which were well attended. By courtesy of the City Library a display of books, photographs and examples of handicrafts were held in the entrance hall of the Central Library, and a public meeting and film show in the City Museum Lecture Hall. Numerous requests for speakers were received from organisations throughout the year.

During the year, all children under the age of 16 attending the occupation centres were tested for phenylketonuria. Three previously unsuspected cases were discovered, although unfortunately all three were too old for treatment.

Two young children with this condition are attending the East Leeds Centre and are receiving the appropriate diet. Their progress so far is very satisfactory.

Dr. Blythe of the Department of Genetics, Leeds University and Professor Lathe of the Department of Chemical Pathology, who are conducting investigations into the biochemical abnormalities associated with mental subnormality have been given access to our case records and other material in the Department.

## RUTLAND LODGE HOSTEL

The first of the Department's residential hostels was opened on 31st October, the opening ceremony being performed by Alderman Dr. Z. P. Fernandez, Chairman of the Mental Health Services Sub-Committee. Rutland Lodge has accommodation for 36 post-psychotic male patients who are fit for discharge from hospital, but have no homes of their own, or have unsatisfactory homes. It is intended that residents in the hostel should be sufficiently recovered to go out to work and be self-supporting or have a reasonable prospect of becoming so. At the end of the year 13 men were in residence, of whom seven were in full employment.

## WORK UNDERTAKEN IN THE COMMUNITY

### **Prevention, Care and Aftercare** (*Mr. V. J. G. Bosworth*).—

There have been certain changes in the section staff during the year. One worker moved to child guidance work in Dewsbury at the end of August and another, working part-time with the section, moved to the West Riding at the beginning of December. Two workers joined the section on 1st December, one from a mental deficiency hospital and the other from a local mental hospital. There has been a fair loss of working time through sickness in the section. One post for psychiatric social worker still remains vacant, although it has been frequently advertised.

The Department still works in close co-operation with the psychiatric unit at St. James's Hospital. There has been a re-organisation of duties since the appointment of a psychiatric social worker to the unit in March. She has taken over more of the in-patient work, as she is "on the spot". The figures relating to hospital cases reflect this, (1960 - 166, 1959 - 308). Close liaison has been maintained with this worker and overlap on cases has been almost completely avoided. Referrals from the out-patient clinics for after-care and requests for home reports and social histories, etc., are comparable in numbers to past years. There are a number of patients who are seen monthly by the psychiatrist at the out-patient clinic as well as by the social worker in the home.

Making allowance for a loss of one month's working capacity due to staff changes and sickness, Table V compares favourably with last year, even with the additional worker at the psychiatric unit, indicating that the volume of work in the field has, if anything, again increased. Of the total cases dealt with, 303 were new cases and 522 had been known to the Department before. Among the total cases are 323 men and 502 women. St. James's Hospital psychiatric out-patient's clinic (104), in-patients (74), Menston Hospital (29), and other mental hospitals (16) comprised the majority of new case referrals. There were 25 direct from patients or their relatives and friends and 16 from others Corporation departments, e.g. Welfare Services. Other referrals were made by general practitioners, University Department of Psychiatry, Almoners, National Assistance Board and Probation Office. Fewer referrals came from general practitioners this year, probably because referral was more often direct to the psychiatric unit and the Department was not used as an intermediary.

Twice as many visits are paid to the home than interviews which take place at the office. Some cases will be seen only once or twice, others may be seen at regular intervals during the year. The average number of interviews per patient is 7.

The therapeutic social club has now really settled down in the bright, cheerful premises in Hanover Square, which it occupies by kind permission of the Welfare Services Committee. It has held 92 meetings on Mondays and Thursdays. The attendance ranges between 12 and 30, with a regular membership of about 40. Members pay a small subscription each night they attend. The club is run by its own committee. A coach trip was organised during the summer round the Derbyshire Dales and a theatre evening in the autumn.

The Department has co-operated with the Department of Social Studies, University of Leeds, in providing practical work for students as in the past. Monthly visits have been paid to one of the Maternity and Child Welfare Clinics where specific cases have been discussed relating to problems of mental health. Fortnightly, the section shares case discussions with the social workers of the Leeds Council of Social Service, Family Service Unit and Jewish Board

of Guardians. At these it is hoped each worker will be able to glean experience from the outlook of workers in other fields. The section represents the Mental Health Service on the Co-ordinating Committee for Children Neglected or Ill-Treated in their own homes.

The Rosemary Fellowship, a voluntary organisation centred on the psychiatric unit at St. James's Hospital, has again been most generous with gifts of food parcels and coal at Christmas for fifty needy people. Small grants of money have also been given and other material assistance, e.g. bedding, garden tools, children's clothes. Mentally ill folk are also being visited by their members. The section greatly appreciates their generous help and would congratulate them on the success of their organisation. We have also to thank the Leeds District Aid in Sickness Fund for generous grants to a number of our cases, and the Disablement Resettlement Officers of the Ministry of Labour for the help they have given us, including the placement of several candidates in the Industrial Rehabilitation Unit.

An additional duty since October has concerned the Rutland Lodge Hostel. The section has been responsible for visiting patients in hospital prior to discharge and maintaining liaison with the consultant psychiatrist and social workers at Menston Hospital; for conducting patients to the hostel and for help in the initiation of employment schemes, with the co-operation of the Establishment Officer. The hostel is visited at least once a week and close co-operation is maintained with the warden over matters of treatment, employment or general advice on psychiatric matters.

It is hoped that in view of the increase in the section's duties we shall be able to maintain our present number of staff and clerical help in 1961 and be able to fill the vacant post of psychiatric social worker.

**Lunacy and Mental Treatment Acts, 1890-1930, Mental Health Act, 1959** (*Mr. T. S. Hawkesworth*).—With the first commencement order made under the Mental Health Act, 1959, the mental hospitals ceased notifying local authorities of admission to their hospitals on an informal basis and also no longer gave notice of death and

discharges of patients except in cases when, in their opinion, after-care was needed. It is, therefore, impossible to give a complete picture of the number of Leeds patients who are in hospitals for treatment of mental illness.

On 1st November last, the Mental Health Act came into full operation and from that date it was no longer necessary to call on the services of a Justice of the Peace to make orders for the compulsory detention of patients in hospitals. This report would not be complete without an expression of thanks to the Magistrates who took a keen interest in mental health and who often at great inconvenience to themselves were always willing to see patients and relatives; their advice and assistance was invaluable to my colleagues and myself.

With the repeal of the Lunacy Act, 1890, the authority held by the Relieving Officers and later by the Duly Authorised Officers to act in cases of emergency on their own initiative is no longer available, and it is now necessary to obtain recommendations signed by medical practitioners before a patient can be compulsorily removed to hospital for observation.

The number of cases reported to the Department during the year shows a very slight decrease, as do the visits paid, but with the new regulations more time is spent on each case (when compulsion is necessary) in obtaining the requisite medical recommendations before action can be taken and often an emergency order can take twice as long to deal with as previously.

In the ten months to 31st October, 1960, 296 patients were admitted on Section 20 Orders as compared with 287 for the same period in 1959.

A reduction in the number of patients admitted to mental hospitals on Summary Reception Orders followed the trend of recent years, and during the period to 31st October, 1960, only 76 patients were admitted.



During the last two months in the year it was found necessary to use compulsory orders under the Mental Health Act in 45 cases.

As in previous years, wherever possible patients have been admitted to hospital on an informal basis, and although difficulties have arisen from time to time with regard to the bed situation, a close co-operation with the various hospitals has been maintained.

**Mental Subnormality** (*Mr. R. Perry*).—The number of mentally handicapped children and adults ascertained during the year and the numbers on the registers at the close of the year are shown in the Tables II and III of the Appendix. The number of male patients ascertained during the year (64) is approximately the same as in 1959 (62), but the number of females ascertained (27) shows a reduction on the 1959 figure (44), thus reducing the total number ascertained as compared with last year, by 15.

*Guardianship*.—At the end of the year there were ten cases under guardianship, 7 male and 3 female. Of this number six are under the guardianship of social workers and it is intended to transfer these cases to the guardianship of the Local Health Authority. Two are regarded as suitable for discharge and two will remain under their present guardians.

In addition to patients under guardianship, there are a number of youths and men who are provided with lodgings in approved houses in various districts of the city. Most of these patients are in employment and are self-supporting, but are unable to budget for themselves. A social worker visits each week for the purpose of assisting them with their finances. Any balance left after paying board and lodgings, pocket money and incidental expenses is paid to the patient's personal savings account.

A number of these patients were again taken to Scarborough for a week's holiday. They were accommodated in a small private boarding establishment and were in the charge of a social worker. The proprietress of the establishment is sympathetic and kindly, and she and the members of her family and staff go out of their way to make the holiday a success.



*Patients in Hospital.*—The number of patients remaining in hospital care at the end of the year was 477 males and 412 females, a total of 889. Of that number 660 or 74 per cent. have been transferred to informal status. The number of patients awaiting admission to hospital at the close of the year was 25. The majority of these cases are severely subnormal children under the age of 16 years, some of whom have been on the waiting list for a long period. It is anticipated, however, that new accommodation will be available early in 1961.

During the year 19 males and 20 females have been provided with short-stay accommodation in hospitals and we are grateful to the medical superintendents of the hospitals concerned for their co-operation, as it is not always easy at short notice to find accommodation of this kind.

*Training Centres.*—The number of patients attending the training centres and sheltered workshops at the end of the year was 445 (Table IV) this figure includes 38 from the West Riding area. Most cases notified during the year who were suitable for centres have been admitted. At the end of the year seven cases, 5 male and 2 female, were awaiting admission when transport is available.

The patients at all the centres were taken on a seaside excursion during the summer and this is a highlight which is eagerly looked forward to.

The thanks of the Committee are tendered to the organisers of the *Yorkshire Evening Post* Toy Appeal for their generous gift of toys to each child attending the centres. The distribution of these toys by Santa Claus at their Christmas parties is a source of great delight to the children.

*Sheltered Workshop.*—Ten male patients have been employed in fettling and assembling weighing machine components for a local firm of weighing machine manufacturers.

*Laundry Centre.*—The laundry employs approximately 35 patients and work is undertaken for Corporation departments.

Wages are paid varying from 1/2d. to 2/3d. per hour, working 44 hours. The average number of articles laundered per week is 10,000.

*Film.*—The Committee's film "Towards a Happier Life" which portrays the methods of occupation and training of children in occupation centres has again been in heavy demand, and during the year 69 bookings have been made by Parents' Associations, Universities, Hospitals and other kindred organisations.

### JUNIOR TRAINING CENTRES

**East Leeds Junior Training Centre.**—(*Mrs. G. Jones*).—The total number of children on the roll at the end of the year was 121. Of these, five are West Riding cases. Four boys were transferred to the North Leeds Senior Training Centre, and two boys to the Stanningley Junior Training Centre.

As in previous years, children are transferred to the senior centres when their physical and mental progress warrants it rather than on reaching the age of 16. There are no children over 16 at the Centre.

In July, 47 of the older children had a coach outing to Filey which was much enjoyed. Refreshments were provided by the Parents' Association. The children who were too young for this outing spent an enjoyable day at the Stanningley Centre.

The Rev. W. H. S. Purcell conducted the Harvest Festival Service. Gifts of fruit and flowers were sold later and the proceeds went to the funds of the Parents' Association.

The children enjoyed a small display of fireworks on Bonfire Night. These and the traditional "Parkin Pigs" were provided by the Parents' Association.

The Rev. G. A. M. Adams of St. James's Church, Seacroft, took charge of the Christmas Service and nativity play. The cassocks and surplices worn by the choir boys in the play were kindly lent by this church. On the following day the Christmas Party was held.

Each child received a present, and for these we are indebted to the Parents' Association, the drivers of the cars and the *Yorkshire Evening Post* Toy Fund. In addition to the gifts previously mentioned, we have to thank the Parents' Association for the gift of four Canterbury looms.

The centre was open to the public during Mental Health Week, and visitors had an opportunity of seeing the children at work in their classrooms.

**Nowell House Short Stay Home.**—Eighty-three children were admitted during the year for periods of up to eight weeks. Ten of these children were from other authorities in the North of England. There were no serious outbreaks of infection during the year, and whenever possible bacteriological tests were carried out before admission to exclude dysentery and other intestinal infections. Two children under treatment for phenylketonuria were admitted, and received the appropriate dietetic treatment.

**Stanningley Junior Training Centre.** (*Miss I. Bye*).—There have been 21 new admissions during the year; of these five were West Riding, bringing the total to 108 including nine West Riding. The youngest is two years old. During the year three boys and two girls have been transferred to residential care. One West Riding girl left the district. Four boys have been transferred to North Leeds Centre.

In January a full-time escort was appointed to one of the ambulances. The children admitted to the Centre during the year have been mostly young children of low intelligence and the work is based increasingly on care and training.

During the year students from the National Association for Mental Health have taken part of their practical work at this Centre and the Centre has been a source of interest to students from the Teachers' Training College, Nursery Nurses, Social Workers, etc., and numerous official deputations from other authorities. We have had another visit from Dr. Mary Sheridan (Ministry of Health) who also took some films of the children.

Regular medical and dental inspections have taken place, and advantage was taken of the polio injections arranged by the Immunisation Section.

The annual trip to Filey was again a source of delight to the children. On 30th June we entertained 44 children and staff from the East Leeds Centre. They had an enjoyable time in the garden.

The annual garden party arranged by the Parents' Association was a huge success. The Parents' Association took this opportunity of expressing their appreciation by presenting to Mrs. Cooper (the senior member of staff who retired in June after 17 years service) with a transistor wireless set and a cheque.

In July the Centre was open to the general public to mark Mental Health Year.

The Lord Mayor and a party of Aldermen and Councillors of Leeds paid a visit to the Centre during August.

The Christmas Party was greatly enjoyed. The Parents' Association provided an entertainer.

A local school held a carol service and presented a cheque to be spent on the children.

The spastic department which caters for children with dual defects is full to capacity and we eagerly await the building of the new wing.

The transportation of children continues to be very satisfactory.

**Medical Care of Children in the Occupation Centres** (*Dr. I. M. Holoran*).—Like the children who attend the special schools in Leeds, all those who attend the occupation centres have a routine medical inspection every two years. They are also seen in the interval at least once a year if any physical defect is found. Parents are invited and the staff of the centre join with the School Health Service doctor in forming an all-round assessment of the child's difficulties.

In addition to the above arrangements the School Health Service, through its orthopædic team, continues to advise on the management and treatment of the cerebral-palsied children who attend the centres. A few other children who have orthopædic defects are also seen at the same sessions.

Dr. Holoran has paid five visits to the centres for this purpose during the year. Dr. Lewis, the pædiatric member of the team, has usually attended as well. The advice of Mr. Clark, F.R.C.S., our orthopædic consultant is available at the clinic held at the Education Offices, when this seems desirable.

The following table shows the distribution of these dually handicapped children :—

		Severe Cerebral- Palsied Children	Mildly Cerebral- Palsied Children	Children suffering from other orthopædic defects	Total
Stanningley Centre ..	..	25	10	3	38
East Leeds Centre ..	..	—	12	6	18
Receiving therapy at home .. ..	.. ..	2	—	—	2
					<hr/> 58 <hr/>

Of the cerebral-palsied children attending the Stanningley Centre 20 are chairbound. All these children require help with toileting, while more than half of them are incontinent.

Mr. Hunt continues as a full-time remedial gymnast at the Stanningley Centre. Four children from the East Leeds Centre have been given physiotherapy at the nearby East Leeds school clinic. A number of children have made appreciable physical progress during the year, while for others one can only aim at avoiding the onset of contractures and so make the child more comfortable and easier to handle.



Taking the medical service to the centres allows close liaison with the staff who handle the child and of valuable discussion with therapists; parents can be advised, general progress can be noted, and arrangements made for any necessary reassessment.

Teamwork is essential if the best results are to be obtained for these dually handicapped children.

**North Leeds Training Centre and Sheltered Workshop** (*Mr. Wardman*).—The year commenced with the sheltered workshop employing ten youths working a 44 hour week, which has been maintained throughout the year until the award of a reduction of two hours weekly was agreed, bringing a 42 hour working week with no reduction in wages, the average rate being 2/7½d. per hour.

The output has been maintained, the components handled amounting to a total of 584,636 parts as against 425,500 parts last year. Illness during the year has been negligible.

Two youths obtained work in the open labour market from the sheltered workshop, enabling us to transfer two youths from the training centre into the sheltered workshop.

The concrete section is also functioning very well and this year, production has been 1,100 sets of concrete covers for the Parks Department, as well as numbers of edging stones and concrete flag stones.

The training centre commenced the year with 105 Leeds cases and 19 West Riding cases. During the year 19 new Leeds cases were admitted and four former cases were re-admitted. Twenty-six left the training centre; of these latter 12 went to work in the open labour market, two were transferred to the sheltered workshop and five allowed to stay at home to help and to seek work. Seven West Riding cases were admitted (five new cases and two who were formerly Leeds cases), making a total of 26 West Riding cases.



The transitional class for boys under 16 is working very well, the youths receiving training in handcraft, which prepares them for the senior centre.

We are still continuing all our former types of handcraft work, although weaving in various forms predominates.

The City's day nurseries continue to send toys for repair which, along with new work items such as stool frames, ironing boards, folding card tables and various other jobs, are all undertaken in the woodwork section. We were very pleased to receive three certificates of merit for work submitted to the Wembley Handcrafts Exhibition.

The Centre's soccer team did particularly well with victories at Meanwood Hospital, East Moor School and local Youth Club teams, but the event of the year was our trip to Whixley Hospital for our annual football match which resulted in a triumph for Whixley. Nevertheless the team and spectators thoroughly enjoyed it and the pro's and con's were discussed over the table at the tea party provided by the hospital superintendent.

Our annual trip to Redcar proved a great success, although the weather could have been kinder.

The Parents' Association at the Centre is working hard in their various efforts, and we are indebted to them for providing the Centre with a combined radio recorder and amplifiers, a tape recorder and many records, over the year. The transport which takes the footballers and spectators to Whixley is also provided by them.

The total number on register is :—Training Centre 122; Sheltered Workshop 10.

**Armley Grange Senior Training Centre** (*Mrs. K. Taylor*).—The highlight of the year for the 48 patients and the staff of Armley Grange was the transfer to the newly built Training Centre on 1st October. Every patient had a hand in the cleaning of and the removal into the new premises, and domestic duties are still carried out with great pride. We have had numerous visitors, all impressed, and many quite envious.

We have again sold well over £100's worth of handcrafts. More girls have been taught the more skilled handcrafts and the more responsible domestic duties have been undertaken by a much larger group. Three of our girls have gone to work at the Pioneer Laundry where they are making good progress, and two are employed with firms in the city. Transfers from the East Leeds Centre have kept our numbers up to 48. The average attendance for the year was a record, being 92 per cent. and the transport service must claim a large proportion of the credit. On the afternoon of 6th December the Centre was open to the general public to celebrate Mental Health Year. We had an exceptionally good attendance and people were very surprised at the standard of the handwork, and were also delighted with the singing and dancing display. Quite a number of the visitors said they had no idea that such work could be done with mentally handicapped people and would in future take more interest in the work.

The weather was very kind to us when we had our two outings, the first in early June to Whitby, and the second to Bridlington on 21st September. The Parents' Association gave us a Christmas Party on 9th December and we concluded a very happy and successful year with our usual dinner party on 22nd December.

**Pioneer Laundry** (*Mrs. Petty*).—There are now 33 girls and women employed at this Centre. They are paid according to ability up to the standard commercial rates, and all are able to contribute to their own support. Each girl receives a free mid-day meal and travelling tokens. Approximately 10,000 articles are laundered weekly and a good standard of work is maintained.

The girls are encouraged to save their money for an annual holiday and this year five girls were taken on a week's holiday to Cleethorpes under the supervision of a member of the staff. The girls have an annual outing to the seaside and a visit to the pantomime.

Attendance has been very good throughout the year and there has been little absence from sickness.

## APPENDIX.

TABLE I.

CASES DEALT WITH BY AUTHORISED OFFICERS

	Males	Females	Total
1. Visits paid .. .. .	597	1,262	1,859
2. Removed to St. James's and Stanley Royd Hospitals under Section 20 of the Lunacy Act, 1890, to 30.10.1960 ..	114	182	296
3. Certified patients transferred to Menston Hospital .. .. .	21	28	49
4. Certified patients transferred to Stanley Royd Hospital, Wakefield .. ..	6	14	20
5. Certified patients transferred to Storthes Hall Hospital .. .. .	..	1	1
6. Certified patients transferred to other mental hospitals .. .. .	3	3	6
7. Total Mental Hospital admission on Summary Reception Orders or Petition .. .. .	30	46	76
8. Patients admitted under Compulsory Orders since the Mental Health Act			
Menston Hospital .. .. .	8	2	10
Stanley Royd Hospital .. .. .	1	2	3
St. James's Hospital .. .. .	12	16	28
Storthes Hall Hospital .. .. .	..	1	1
Others .. .. .	2	1	3
9. Total of patients admitted under Compulsory Order .. .. .	23	22	45
10. Patients admitted on an informal basis ..	140	218	358
11. Total admissions to Menston Hospitals (Total of Items 7, 9, and 10) .. ..	193	286	479

TABLE II.

PARTICULARS OF MENTAL DEFECTIVES ASCERTAINED DURING 1960.

	Males	Females	Total
1. Ascertainment.			
(a) Cases reported by Local Education Authority (Section 57, Education Act, 1944) :—			
(i) Ineducable children .. .. .	14	6	20
(ii) At 15 years—on leaving Special School .. .. .	12	7	19
(b) Other cases reported during 1960 and ascertained to be "subject to be dealt with" .. .. .	1	..	1
(c) Other cases reported during 1960 who are not at present "subject to be dealt with" but for whom the Local Health Authority may subsequently become liable .. .. .	37	14	51
Total number of cases reported during the year .. .. .	64	27	91
2 Disposal of cases reported during the year.			
(a) Cases ascertained to be "subject to be dealt with":—			
(i) Placed under Statutory Supervision .. .. .	24	13	37
(ii) Placed under Guardianship .. .. .	..	..	..
(iii) Admitted to Institutions .. .. .	3	..	3
(b) Cases not at present "subject to be dealt with":—			
(i) Placed under Voluntary Supervision .. .. .	37	14	51
Totals .. .. .	64	27	91

TABLE III.

PARTICULARS OF LEEDS SUBNORMALS ON 31st DECEMBER, 1960

	Males	Females	Total
(a) Under Supervision .. .. .	452	301	753
(b) Under Guardianship .. .. .	7	3	10
(c) In Hospitals .. .. .	477	412	889
Totals .. .. .	936	716	1,652

TABLE IV.  
TRAINING CENTRES

Centre	Male		Female		Totals
	Under 16	Over 16	Under 16	Over 16	
Training Centres					
Stanningley .. ..	63	..	43	2	108
East Leeds .. ..	77	..	44	..	121
Armley Grange .. ..	..	..	1	47	48
North Leeds .. ..	18	104	..	..	122
	158	104	88	49	399*
Sheltered Workshops					
North Leeds .. ..	..	10	..	..	10
Pioneer Laundry .. ..	..	1	..	35	36
	..	11	..	35	46
Totals .. ..	158	115	88	84	445*

\*Includes 38 West Riding cases.

TABLE V.  
PSYCHIATRIC AFTER-CARE 1960

	Males	Females	Total
1. Hospital cases (in- and out-patients) ..	75	91	166
2. After-care cases .. .. .	248	411	659
3. Total cases dealt with .. .. .	323	502	825
4. Total new cases referred .. ..	118	185	303
5. Total visits and interviews .. ..	1,420	3,410	4,830

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## Housing

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## HOUSING ACTS, 1936-1959

### *Repair, Individual Demolition, Clearance and Overcrowding*

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,  
*Chief Public Health Inspector*

Statistical data in this section of the Report has been compiled by Mr. H. P. Gill.

**Number of Houses.**—The total number of houses and flats in the city on 31st December, 1960, was 173,810 made up of 52,347 back-to-back houses and 121,463 through houses and flats.

**New Houses.**—The number of permanent new houses and flats completed during the year was 4,179; of these, 2,966 were built by the Corporation and 1,213 were erected by other bodies and persons. During the year the Local Authority converted 40 houses into 97 flats and 25 houses were converted into 57 self-contained flats by private owners.

**Housing Shortage.**—The number of applications for houses on the registers at the Housing Department on 31st December, 1960, was 21,321 of which 19,485 were regarded as adequately housed.

**Overcrowding.**—There is a further slight improvement in the degree of overcrowding, the percentage on Corporation Estates having fallen from 0·40 to 0·25. There are 44,844 occupied dwellings on the municipal estates in the city and the average percentage of overcrowding during the year was 0·25.

90 families who were living in overcrowded privately owned houses have been rehoused; all these families have been accommodated in municipal dwellings.

There have been no applications for licences to permit temporary overcrowding during the year.

The number of certificates of permitted numbers issued during the year was 5.

**Housing Repairs and Rents Act, 1954, and Housing Act, 1957.**—No houses in Clearance Areas were considered to be of a sufficiently good standard for them to be retained as providing accommodation of a standard which is adequate for the time being.

HOUSING ACTS, 1936-1957, PART IV.—OVERCROWDING.  
January 1st to December 31st, 1960.

	1960
Number of new cases of overcrowding discovered in houses owned by the Corporation .. .. .	24
Number of cases of overcrowding in houses owned by the Corporation which have been relieved .. .. .	38
Number of overcrowding cases relieved during the year in course of slum clearance operations .. .. .	23
A. No. of applications for Municipal dwellings known to be statutorily overcrowded .. .. .	367
B. No. of Municipal Estate dwellings provided to relieve statutory overcrowding .. .. .	90

**Unfit Houses.**—During the year 23,552 dwelling-houses were surveyed and examined and 11,324 nuisances and housing defects were remedied. Houses numbering 4,054 found to be defective in one respect or another under the Public Health Act were repaired in response to notices served under this Act.

The number of houses inspected under the Housing Act, 1957, and found not to be in all respects reasonably fit for human habitation and capable of repair was 182.

When private owners failed to remedy urgent housing defects or serious nuisances after the service of statutory notices, the Department carried out the necessary work as a matter of urgency. Such work in default was carried out to 26 houses under the Public Health Act at a cost of £127 16s. 8d., this amount being recovered from the owners of the properties concerned.

**Demolition of Individual Unfit Houses.**—The number of Demolition Orders made was 52 whilst 9 Closing Orders were made on parts of buildings. In the case of 44 houses the demolition of which was inexpedient because of structural considerations, Closing Orders were made under the terms of Section 17, Proviso to Sub-Section 1 of the Housing Act, 1957. In the case of one Closing Order the owner submitted a list of works to make the house fit and this was accepted, the works being subsequently satisfactorily carried out and a nominee from the Corporation Housing Register was accepted as tenant.

The number of houses demolished was 128. During the year 113 families consisting of 362 persons affected by either Demolition or Closing Orders were rehoused by the City Council, while 21 families found their own accommodation ; a further 63 houses were demolished by other Corporation Departments.

**Clearance Areas.**—During the year 69 areas comprising 2,911 houses were officially represented to the City Council. This is somewhat less than the figure for 1959 but it greatly exceeds the average figures for recent years and is very near to the target figure which currently stands at 3,000 houses per year. The number of occupants was 8,494. During the year 5 Public Inquiries were held in respect of 28 areas, comprising 2,315 houses. In addition, whilst no Public Inquiry was held in respect of the Beeston Royds Clearance Areas Nos. 1 and 2, an Inspector from the Ministry of Housing and Local Government visited and inspected these areas which comprised 25 houses.

No. of houses	Areas	Date of Inquiry
747	Moor Crescent Road Clearance Areas Nos. 1 and 2	12.1.60
121	Moorville Street (Lady Pit Lane) Clearance Areas Nos. 1 and 2 .. .. .	12.1.60
239	Hyde Park Road "A" Clearance Areas Nos. 1 to 4 .. .. .	9.2.60
107	New Princess Street (Elland Road) Clearance Areas Nos. 1 to 3 .. .. .	9.2.60
74	Benson Street (Sheepscar) Clearance Area No. 2	9.2.60
86	Elland Street (Elland Road) Clearance Area ..	16.2.60
47	Red Lion Yard (Thwaite Gate) Clearance Areas Nos. 1 to 4 .. .. .	3.5.60
137	Pitfield Street (Hunslet) Clearance Areas Nos. 1 and 2 .. .. .	3.5.60
33	Great Wilson Street Clearance Areas Nos. 1 to 3	3.5.60
554	Wellington Road Clearance Areas Nos. 1 to 3 ..	27.9.60
45	Johnson Street Clearance Area .. .. .	27.9.60
125	Upper North Street Clearance Areas Nos. 1 and 2	27.9.60

The "confirmation" by the Ministry of Housing and Local Government has been received for 41 areas, the total number of houses affected being 3,234 as compared with 44 areas involving 977 in the previous year.

The average number of persons per house in all areas represented during the year was 2.58. The number of houses demolished in confirmed Clearance Areas during the year was 1,141.

During the year 21,640 enquiries about the position of houses in relation to the City Council's Slum Clearance Programme were answered.

The table below gives a summary of action under the Demolition Closing and Clearance Sections of the Housing Act, 1957.

	1958	1959	1960
<b>SECTION 17—HOUSING ACT, 1957 :—</b>			
No. of houses represented for demolition .. ..	546	62	59
No. of Demolition Orders made .. ..	460	130	52
No. of families concerned .. ..	438	69	47
No. of persons concerned .. ..	1,323	178	126
<b>SECTION 17 (1),—HOUSING ACT, 1957 :—</b>			
No. of dwellings represented for closing .. ..	137	62	37
No. of Closing Orders made .. ..	123	67	44
No. of families concerned .. ..	134	73	52
No. of persons concerned .. ..	465	261	181
<b>SECTION 18—HOUSING ACT, 1957 (Parts of Buildings) :—</b>			
No. of dwellings represented for closing .. ..	9	8	9
No. of Closing Orders made .. ..	9	7	9
No. of families concerned .. ..	9	10	9
No. of persons concerned .. ..	35	29	34
No. of undertakings accepted from owners .. ..	41	47	22
No. of houses demolished .. ..	2,038	1,448	1,269
No. of houses (Parts of Buildings) closed .. ..	39	7	9
No. of houses closed .. ..	82	67	44
No. of families re-housed by Corporation at 31.12.60 (S.S. 17, 17(1) and 18, H.A., 1957) .. ..	515	302	113
No. of families awaiting re-housing at 31.12.60 (S.S. 17, 17(1) and 18, H.A., 1957) .. ..	182	68	40
No. of families who found own accommodation at 31.12.60 (S.S. 17, 17(1) and 18 H.A., 1957) .. ..	32	44	21
No. of families re-housed at 31.12.60 (S.42, H.A., 1957) .. ..	1,050	1,293	2,168
No. of families who found own accommodation (S. 42, H.A., 1957) .. ..	85	190	188
No. of houses referred for opinion but not represented	205	197	201
No. of dwellings represented (S. 17, 17(1) and 18 H.A., 1957) which stood in Slum Areas ..	469	55	67

The following table shows the number of houses examined by the Medical Officer of Health as part of the general survey of the City during the year ended 31st December, 1960, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts.

	1958	1959	1960
Number of new houses erected during the year .. .. .	3,665	3,559	4,179
(i) By the Local Authority .. .. .	2,606	2,035	2,966
(ii) By other bodies and persons .. .. .	1,059	1,524	1,213
1 <i>Inspection of dwelling-houses during the year.</i>			
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made .. .. .	30,948	25,018	23,552
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidation Regulations, 1925, and the number of inspections made .. .. .	3,874	2,944	3,006
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .. .. .	2,981	2,413	3,290
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .. .. .	641	306	182
2. <i>Remedy of Defects during the year without Service of Formal Notices.</i>			
Number of defective dwelling-houses rendered fit in consequence of informal action .. .. .	3,563	2,433	2,551
3. <i>Action under Statutory Powers during the year.</i>			
A.—Proceedings under Section 9 of the Housing Acts, 1936 and 1957.			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs .. .. .	..	..	..
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices:—			
(a) By owners .. .. .	..	..	..
(b) By Local Authority in default of owners .. .. .	..	..	..
B.—Proceedings under the Public Health Acts.			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied .. .. .	2,054	1,364	1,084
(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—			
(a) By owners .. .. .	1,860	1,438	1,503
(b) By Local Authority in default of owners .. .. .	29	15	26
C.—Proceedings under Sections 17 and 18 of the Housing Act, 1957.			
(1) Number of dwelling-houses in respect of which			
(a) Demolition Orders were made .. .. .	460	130	52
(b) Closing Orders were made:—			
(i) S. 18, H.A., 1957 .. .. .	9	7	9
(ii) S. 17(1), H.A., 1957 .. .. .	123	67	44
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders .. .. .	194	464	128



**Housing (Financial Provisions) Act, 1958-Section 3 (2) (a).—**During the year 55 houses owned by the City Council were declared to be unfit for human habitation ; the necessary certificate of unfitness was furnished in respect of them and 41 houses affected by such action under this Act were demolished.

**“ Pheonix ” Prefabricated Bungalows.**—Because of the continuing housing shortage in the post-war years, which has been affected also by the increasing rate of slum clearance work, pre-fabricated bungalows erected in the early post-war period have, by common consent, had to remain in use beyond the initially anticipated 10-year period of “ life ”. One group, however, of 200 “ Phoenix ” type bungalows on the Belle Isle Estate had increasingly shown signs of deterioration and unfitness and, after consultation with the Ministry of Housing and Local Government, authority was given for their closure and removal. In this connection certificates of unfitness under the Housing (Financial Provisions) Act, 1958, Section 3 (2) (a) were issued. Clearance commenced and is still proceeding.

**Certificates of Disrepair.**—Details of the numbers of applications for Certificates of Disrepair and applications for cancellations of Certificates of Disrepair which have been dealt with since the Rent Act, 1957, came into force on 6th July, 1957, until 31st December, 1960, are given in the following table :—

**RENT ACT, 1957. First Schedule**

APPLICATIONS FOR CERTIFICATES OF DISREPAIR	
(1) No. of applications for certificates .. .. .	1,296
(2) No. of decisions not to issue certificates .. .. .	30
(3) No. of decisions to issue certificates :—	
(a) in respect of some but not all defects .. .. .	1,000
(b) in respect of all defects .. .. .	238
(4) No. of undertakings given by landlords under Paragraph 5 of the First Schedule .. .. .	959
(5) No. of undertakings refused by Local Authority under proviso to Paragraph 5 of the First Schedule .. .. .	4
(6) No. of certificates issued .. .. .	242
APPLICATIONS FOR CANCELLATION OF CERTIFICATES OF DISREPAIR	
(7) Applications by landlords to Local Authority for cancellation of certificates .. .. .	168
(8) Objections by tenants to cancellation of certificates .. .. .	69
(9) Decisions by Local Authority to cancel in spite of tenant's objections .. .. .	30
(10) Certificates cancelled by Local Authority .. .. .	129



**Improvement Grants.**—The Housing Committee has continued to make grants under the Housing (Financial Provisions) Acts, 1958 and 1959, to enable the improvement of sub-standard houses to be carried out by installing modern amenities such as bathrooms, internal water closets, food stores, etc.

**Improvement Grant Areas.**—In addition to grants to owners of individual houses, further surveys were made of whole areas in various parts of the city which were regarded as suitable for action under the "Improvement Grant Area" policy. The owners of the houses in such areas have been approached and informed of the facilities available for improving their houses. They have also been informed that the City Council was prepared to lend that part of the cost to be borne by the owner. Alternatively, the owners have also been notified that if they do not themselves wish to carry out these improvements, the City Council would be prepared to purchase the property and carry out the improvements. The aim in these cases is to find whole areas of well-constructed houses lacking modern amenities and by encouragement and offers of help (and even if need be by compulsory powers) to ensure the complete improvement of such areas. This avoids the difficulties which arise when odd houses in older blocks are brought up to a good standard but the adjacent properties still remain unimproved.

**Standard Grants.**—The House Purchase and Housing Act, 1958, introduced "Standard Grants" which are available to owners of dwelling houses "as of right" if their properties lack any of the five essential amenities, subject to the "life" of such a house being at least 15 years. It will be noted from the table below that to the end of this year only 40 houses had been improved by this procedure. One reason for this comparatively low figure is that the Authority is not only willing but anxious to carry out improvement grant work as thoroughly as possible and encourages applicants to use the "discretionary" grant procedure in preference to the standard grant procedure which is limited to the provisions of five basic amenities only, namely:—

- (a) a fixed bath or shower in a bathroom,
- (b) a wash hand basin
- (c) a hot water supply,
- (d) a water closet in or contiguous to the dwelling, and
- (e) satisfactory facilities for the storing of food.



### COMPTON ROAD IMPROVEMENT GRANT AREA

These are the better type back-to-back houses with gardens and broad streets, built about 1900. Each house comprises coal cellar, keeping cellar, living room, kitchenette and a large bedroom, a small bedroom and an attic. The small bedroom is being made into a bathroom with bath, lavatory basin, hot water supply and an internal water closet. The old skylighted attic is made into a habitable bedroom by the addition of a dormer window. Uniform treatment of whole blocks has been achieved by approaching the owner of every house and inviting him to carry out improvements with the aid of a grant.



Part of the Wellington Road Clearance Areas Nos. 1, 2 and 3 in which stood 554 unfit houses. A Public Local Inquiry was held in September, 1960. The Compulsory Purchase Order was confirmed by the Minister of Housing and Local Government in December, 1960. Note the shared distant and dilapidated water closet structures, the old ashpit converted to house dustbins and the insanitary unpaved land in the front of same.

All of these five amenities are equally available by "discretionary" grant and, in addition, other improvements such as dormer windows to convert skylighted attics to habitable bedrooms, improved heating appliances and cooking appliances, improved artificial lighting, etc., can be included to the benefit of all concerned. Therefore it is held to be in the general interest to encourage applicants to opt for "discretionary" grants and to obtain comprehensive improvement of their properties.

The position from the commencement of the scheme for both discretionary improvement grants and standard grants is as follows:—

#### IMPROVEMENT/STANDARD GRANTS

Number of houses in respect of which applications received—Improvement Grant/Standard Grant	4,129
Number of houses in respect of which applications withdrawn—Improvement Grant/Standard Grant	502
Number of houses not suitable for Improvement Grant	700
Number of houses not suitable for Standard Grant	23
Number of houses in respect of which formal applications for Improvement Grant have been received	1,491
Number of houses in respect of which formal applications for Standard Grant have been received	212
Number of formal applications for Improvement Grant approved by the Local Authority	1,352
Number of formal applications for Standard Grant approved by the Local Authority	189
Number of houses improved—Improvement Grants	975
Number of houses improved—Standard Grants	40

All applications are dealt with by the staff of the Public Health Department from reception to completion.

**Conversion Areas.**—The City Council has continued its interest in the conversion into flats and maisonettes of houses which are, by present-day standards, too large to be suitable for occupation

by most single families and which are the subject of a number of lettings without the provision of adequate facilities. It is felt that such houses should be properly converted into flats and maisonettes so that each occupier enjoys satisfactory self-contained accommodation.

During the year preliminary surveys of the following areas were made in order that approaches could be made to the respective owners.

Name of Area	Area No.	No. of houses
Studley Grange .. ..	12 ..	59
Studley Grange .. ..	13 ..	51
Studley Grange .. ..	14 ..	64
Belle Vue Road .. ..	— ..	8

Further sub-areas of such houses in the Chapeltown Road district, which is known as the Studley Grange Area, have been surveyed and reported to the Housing Committee with a view to the making of Compulsory Purchase Orders and, in addition, three areas of houses in other parts of the city were the subject of similar action. The areas concerned are as follows :—

Name of Area	No. of houses
Studley Grange No. 4 .. ..	59
Studley Grange No. 6 .. ..	62
Belle Vue Road .. ..	2
Blenheim Square .. ..	23
Hanover Square .. ..	34

In these cases an initial approach was made to owners informing them that improvement grants and loans were available to meet the cost of conversion of houses into self-contained flats and maisonettes and that if they did not wish themselves to convert the houses that the City Council would be glad to acquire these houses (if a satisfactory price could be agreed) in order to ensure the proper conversion of the property.



Where owners were not willing either to improve their houses or to sell them to the Corporation to allow such improvement to take place, the City Council decided to deal with the balance of such houses by way of Compulsory Purchase Order. The Ministry held Public Inquiries as follows :—

Name of Area	No. of houses	Date
Studley Grange Areas No. 1		
and 2 .. .. .	114	9.3.60
Reginald Terrace/Sholebroke		
Avenue .. .. .	58	24.11.60
Beecroft Grove .. .. .	5	3.1.60
Belle Vue Road .. .. .	2	19.1.60
75, Victoria Road .. .. .	1	10.5.60

Confirmation of the Compulsory Purchase Orders was received in respect of the following areas :— Studley Grange Areas Nos. 1 and 2, Beecroft Grove, Belle Vue Road and 75 Victoria Road.



## SUMMARY OF POST-WAR ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Skinner Lane Areas 1 and 2	19.9.49	C.P.O.	27	71	..	29.5.51	27	27
Upper Carr Place Areas 1, 2, 3 and 4	17.7.51	C.P.O.	30	107	..	26.11.52	30	30
Brown's Yard (North Street)	12.5.52	C.P.O.	32	131	..	1.2.54	32	32
Temperance Street (Kirkstall)	8.9.52	C.P.O.	21	61	..	19.5.51	21	21
Burton Street (Dewsbury Road)	20.10.52	C.O.	33	76	..	28.10.53	33	29
Benson Street (Sheepscar)	19.1.53	C.O.	7	13	..	1.8.53	7	7
Franchise Street Areas 1, 2, 3 and 4	15.12.52	C.P.O.	25	79	..	Areas 1, 2 and 4 :— 10.11.53 Area 3 :— 29.10.53	25	25
Low Moor Side (Holbeck) Areas 1 and 2	16.3.53	C.P.O.	30	101	..	18.1.54	30	30
Freehold Street Area	16.3.53	C.P.O.	20	52	..	3.2.54	20	20
Monkton Street (Dewsbury Road) Area	15.6.53	C.P.O.	30	83	14.1.54	8.3.54	30	30
Camp Street Area	15.6.53	C.P.O.	24	76	..	20.1.54	24	24
Saville Green No. 1 Area	13.7.53	C.P.O.	115	349	9.6.54	22.7.54	116	116
Victoria Place (Camp Road) Area	13.7.53	C.P.O.	10	108	6.4.54	9.6.54	10	10
Carr Road (Camp Road) Areas 1, 2 and 3	13.7.53	C.P.O.	16	65	6.4.54	14.5.54	16	16
Sheepscar Street North Area	21.9.53	C.P.O.	14	38	9.6.54	22.7.54	14	12
Pottery Fields Area No. 1	21.9.53	C.P.O.	23	89	..	28.6.54	23	23
Oldfield Lane Areas 1 and 2	16.11.53	C.P.O.	27	84	9.6.54	22.7.54	27	27
Potternewton Lane Areas 1 and 2	16.11.53	C.P.O.	17	36	19.10.54	24.1.55	17	17
Area No. 1	16.11.53	C.P.O.	8	22	9.6.54	22.7.54	8	8
Woodhouse Cliff (Smith's Court) Areas 1 and 2	14.12.53	C.P.O.	16	45	..	7.5.56	16	15
Area No. 1	14.12.53	C.P.O.	6	7	..	7.7.54	6	6
Area No. 2	14.12.53	C.P.O.	6	7	..	7.7.54	6	6

C.O.—Clearance Order      C.P.O.—Compulsory Purchase Order

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Cobourg Street Areas 1 to 8 :—								
Area No. 1 ..	14.12.53	C.O.	2	6	19.1.55	6.7.55	2	..
Areas Nos. 2, 3 and 4 ..	14.12.53	C.P.O.	36	123	19.1.55	6.7.55	35	35
Area No. 5 (part) ..	14.12.53	C.O.	4		19.1.55	6.7.55	4	4
Area No. 6 (part) ..	14.12.53	C.O.	5		19.1.55	6.7.55	5	5
Area No. 5 (part) ..			5	83				
Area No. 6 (part) ..			2					
Area No. 7 ..	14.12.53	C.P.O.	11		19.1.55	6.7.55	21	20
Area No. 8 ..			3					
Saville Green Areas 2 to 10 ..	18.1.54	C.P.O.	367	1,140	19.1.55	10.6.55	367	364
Potternewton Lane Area 3 ..	18.1.54	C.P.O.	3	3	19.10.54	24.1.55	3	2
Carlisle Street (Wellington Road) ..	15.2.54	C.P.O.	42	159	19.10.54	24.1.55	42	42
Charing Cross Street and Scott Street (Woodhouse) ..	15.2.54	C.P.O.	204	595	19.10.54	24.1.55	202	201
Pottery Fields Areas 2 to 7 ..	22.3.54	C.P.O.	154	489	26.10.54	25.2.55	154	154
New Inn Street (Tong Road) :—								
Area No. 1 ..	22.3.54	C.P.O.	5	8	..	24.3.55	5	1
Area No. 2 ..	22.3.54	C.P.O.	6	8	..	24.3.55	6	6
Area No. 3 ..	22.3.54	C.P.O.	43	116	1.3.55	5.5.55	43	43
Area No. 4 ..	22.3.54	C.P.O.	69	186	..	24.3.55	69	68
Whitelock Street (North Street) :—								
Area No. 1 ..	22.3.54	C.P.O.	11	47	26.10.54	10.2.55	10	7
Area No. 2 (part) ..	22.3.54	C.P.O.	31	114	26.10.54	20.5.55	29	21
Area No. 2 (part) ..	22.3.54	C.O.					2	2
Area No. 3 ..	22.3.54	C.P.O.	16	53	26.10.54	20.5.55	16	16
Area No. 4 ..	22.3.54	C.O.	8	8	26.10.54	16.2.55	2	..
Area No. 4 (part) ..	22.3.54	C.P.O.	39	170	26.10.54	20.5.55	39	36
Area No. 4 (part) ..	22.3.54	C.P.O.	154	435	30.8.55	8.11.56	148	140
Upper Wortley Road Areas 1 to 8 ..	21.4.54	C.P.O.			..	8.11.56	1	..
do. Area 2 (part) ..		C.O.	1	..	..	8.11.56	1	..
do. Area 4 ..		C.O.	6	..	..	8.11.56	6	..
do. Area 8 (part) ..		C.O.	7	..	..	8.11.56	7	7
do. Area 8 (part) ..		C.O.	3	..	..	8.11.56	3	3

C.O.—Clearance Order      C.P.O.—Compulsory Purchase Order

## SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Silver Royd Hill Areas 1 and 2 ..	21.4.54	C.P.O.	44	111	1.3.55	16.2.55	44	39
Greenside Road (Lower Wortley) Areas 1 to 4 ..	21.5.54	C.P.O.	62	173	1.4.6.55	4.8.55	62	62
Green Road (Burmantofts) Areas 1 to 5	16.7.54	C.P.O.	645	1,805	6.10.55	4.2.56	642	612
Town Street (Beeston) Areas 1 to 11	24.9.55	C.P.O.	184	413	25.10.55	20.2.56	185	174
Armley Road Areas 1 and 2 ..	19.10.54	C.P.O.	84	229	8.6.55	3.8.55	84	83
Oatland Row (Meanwood Road) ..	19.11.54	C.P.O.	37	86	..	19.5.55	37	37
Church Street (Hunslet) Areas 1 to 15 ..	19.11.54	C.P.O.	162	440	22.11.55	..	..	135
Cross Lane Farnley Areas 1 to 5	17.12.54	C.P.O.	146	374	17.4.56	19.7.56	144	143
Alfred Place (Camp Road) Areas 1 to 6 ..	17.12.54	C.P.O.	21	92	8.6.55	4.8.55	21	21
Villiers Terrace (Camp Road) Areas 1 to 3 ..	21.1.55	C.P.O.	67	491	23.11.55	16.3.56	65	65
Belinda Street (Hunslet) Areas 1 to 6	18.2.55	C.P.O.	126	391	25.9.56	31.1.57	124	117
Michael Street (Hunslet) ..	18.2.55	C.P.O.	12	28	..	2.11.55	12	12
Minor Street (Kirkstall Road) ..	18.2.55	C.P.O.	14	30	..	4.8.55	14	14
Langham Street (Wellington Road) (part) ..	25.3.55	C.P.O.	297	913	19.6.56	8.11.56	287	280
" " (part) ..	25.3.55	C.O.						
Milnes Street (Wellington Road) Areas 1 and 2	25.3.55	C.P.O.	33	88	19.6.56	25.10.56	33	33
Area No. 1 ..	25.3.55	C.O.	10	20	19.6.56	25.10.56	10	10
Area No. 2 ..	25.3.55	C.P.O.	429	1,111	19.6.56	3.10.56	429	419
Beckett Street (Burmantofts) Areas 1 and 2 ..	25.3.55	C.P.O.	443	1,194	6.11.56	29.5.57	438	430
Meynell Street (Holbeck) Areas 1 to 5	20.5.55	C.P.O.	4	26	..	9.3.56	4	4
Northfield Villas (Northfield Terrace)	16.6.55	C.P.O.	13	36	..	17.4.56	13	13
Nevin Street (Hunslet Road) ..	14.7.55	C.P.O.	4	17	..	17.4.56	4	4
Ramsden Terrace (North Street) ..	14.7.55	C.P.O.	4	17	..	17.4.56	4	4

## SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

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AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Buslingthorpe Lane (Meanwood)	14.7.55	C.P.O.	179	471	12.12.56	5. 7.57	179	149
Areas 1 to 7	14.9.55	C.P.O.	34	56	24.10.56	21. 1.57	33	24
West End Terrace (Hyde Park)	14.9.55	C.P.O.	56	105	19. 2.57	17. 5.57	56	42
Areas 1 to 4	20.10.55	C.P.O.	3	15	..	..	..	..
Burley Village (Burley Road)	20.10.55	C.P.O.	71	207	19. 2.57	17. 5.57	71	63
Areas 1 and 2	20.10.55	C.P.O.	15	46	24.10.56	4. 1.57	15	15
Oatland Houses (Duxbury Street)	17.11.55	C.P.O.	40	79	24.10.56	8. 3.57	40	20
Meanwood Street (Meanwood Road)	17.11.55	C.P.O.	55	173	19.6.56	24.10.56	52	53
Areas 1 to 4	17.11.55	C.P.O.	24	60	..	..	24	24
Bentley Cottages (Meanwood)	17.11.55	C.P.O.	2	25	19.6.56	24.10.56	2	2
Burton Row (Hunslet) Areas 1 and 2	17.11.55	C.P.O.	27	64	..	31. 7.57	27	27
Rutland Terrace Areas 1 to 4	17.11.55	C.P.O.	10	21	24.10.56	31.12.56	10	10
Old Belle Isle Cottages (Middleton)	17.11.55	C.P.O.	38	101	24.10.56	12. 3.57	..	34
Areas 1, 2 and 3	17.11.55	C.P.O.	4	10	..	19.10.56	4	4
Louis Street ..	17.11.55	C.P.O.	7	26	..	31.10.56	7	7
Newsam Square (Halton) ..	15.12.55	C.P.O.	291	787	18.3.58	7.10.58	288	234
Sowden Row (Crossgates) Areas 1 and 2	15.12.55	C.P.O.	30	65	..	19.3.58	30	27
Mistress Lane (Armley) Areas 1 and 2	15.12.55	C.P.O.	437	1,096	18.3.58	No. 12:— 22.4.58 Nos. 6 & 7:—2.6.58 Nos. 1-5:— 28.11.58	23	281
Strawberry Road (Hall Lane)	15.12.55	C.P.O.	..	..	..	..	19	..
Byron Street ..	15.12.55	C.P.O.	..	..	..	..	320	..
Argyle Road (Burmantofts)	21.6.56	C.P.O.	..	..	..	..	60	59
Areas 1, 2 and 3	16.3.57	C.P.O.	..	..	..	..	..	..
Club Row (Kirkstall) ..	15.6.57	C.P.O.	..	..	..	..	..	..
Kirkstall Road (East) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12	15.6.57	C.P.O.	..	..	..	..	..	..
Stansfield Row Area	15.6.57	C.P.O.	60	839	..	2.4.58	60	59

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order

## SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued.

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Albert Grove (Camp Road) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17	17.10.57	C.P.O.	386	1,290	2.12.58	1.7.59	386	123
Lower Wortley Road Areas 1	19.12.57	C.O.	14	35	2.12.58	13.7.59	14	
2	19.12.57	C.P.O.	24	63	2.12.58	18.4.59	24	
3	19.12.57	C.O.	7	15	2.12.58	13.7.59	7	
4	19.12.57	C.P.O.	5	12	2.12.58	17.7.59	5	
5 (part)	19.12.57	C.P.O.	147	374	2.12.58	17.7.59	147	
5 (part)	19.12.57	C.O.	3	7	2.12.58	13.7.59	3	
6	19.12.57	C.P.O.	8	18	2.12.58	17.7.59	8	
7	19.12.57	C.P.O.	2	4	2.12.58	17.7.59	2	
8	19.12.57	C.O.	7	13	2.12.58	17.7.59	7	
9	19.12.57	C.P.O.	3	7	2.12.58	17.7.59	3	
10	19.12.57	C.O.	3	7	2.12.58	17.7.59	3	
11	19.12.57	C.P.O.	24	53	2.12.58	17.7.59	24	
12	19.12.57	C.P.O.	26	73	2.12.58	17.7.59	26	
13	19.12.57	C.O.	4	7	2.12.58	17.7.59	4	
Theaker Lane (Armley) Areas 1	15.11.57	C.P.O.	57	150	11.11.58	16.7.59	57	
2	15.11.57	C.P.O.	2	5	11.11.58	22.5.59	2	
3	15.11.57	C.P.O.	92	258	11.11.58	22.5.59	92	
4	15.11.57	C.P.O.	40	124	11.11.58	22.5.59	40	
5	15.11.57	C.P.O.	12	27	11.11.58	22.5.59	12	
6	15.11.57	C.P.O.	2	8	11.11.58	16.7.59	2	
7	15.11.57	C.O.	3	7	11.11.58	13.7.59	3	
8	15.11.57	C.P.O.	35	78	11.11.58	22.5.59	35	
Little London (Camp Road) Areas 1, 2, 3, 4, 5, 6 and 7	20.3.58	C.P.O.	438	1,491	10.2.59	13.10.59	438	343
Bushington Lane (Sheepsbar)	16.6.58	C.P.O.	342	990	7.7.59	23.2.60	334	13
Dolly Lane Areas 1, 2, 3, and 4	15.9.58	C.P.O.	265	691	7.7.59	18.2.60	265	31

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Sayner Lane Areas 1 ..	15.9.58	C.P.O.	326	888	7.7.59	..	..	162
2 ..	15.9.58	C.P.O.	25	63	7.7.59	4.10.59	25	
3 ..	15.9.58	C.P.O.	61	147	7.7.59	7.8.59	61	
4 ..	15.9.58	C.P.O.	6	14	7.7.59	..	6	
5 ..	15.9.58	C.P.O.	4	14	7.7.59	..	4	
6 ..	15.9.58	C.P.O.	8	24	7.7.59	..	8	
7 ..	15.9.58	C.P.O.	12	40	7.7.59	..	12	
Brancepeth Place Areas 1 and 2 ..	15.9.58	C.P.O.	55	157	7.7.59	4.2.60	..	..
Moor Crescent Road Areas 1 and 2 ..	15.9.58	C.P.O.	747	1,927	12.1.60	13.6.60	747	
Moorville Street (Lady Pit Lane) Areas 1 and 2 ..	18.12.58	C.P.O.	..	..	..	..	..	..
Hyde Park Road "A" Areas 1, 2, 3, 4 ..	19.2.59	C.P.O.	121	395	12.1.60	18.5.60	121	
Balm Road (Hunslet) Areas 1, 2, 3, 4 ..	16.3.59	C.P.O.	239	801	9.2.60	12.7.60	237	..
New Princess Street (Elland Road) Areas 1, 2, 3 ..	16.4.59	C.P.O.	159	431	..	..	..	..
Clowes Street (Jack Lane) Area ..	16.4.59	C.P.O.	107	281	9.2.60	15.6.60	107	..
Dickinson's Yard, Armley, Area ..	16.4.59	C.O.	51	115	..	5.1.60	51	..
Benson Street (Sheepscar) Area No. 2 ..	21.5.59	C.P.O.	74	188	..	29.2.60	3	..
Elland Street (Elland Road) Area ..	21.5.59	C.P.O.	86	176	9.2.60	15.6.60	..	6
Wortley Road Clearance Areas 1, 2, 3, 4, 5 ..	21.5.59	C.P.O.	81	166	16.2.60	15.6.60	86	..
Wellington Road Areas 1, 2, 3 ..	18.6.59	C.P.O.	554	1,500	..	..	..	..
Red Lion Yard (Thwaite Gate) Areas 1, 2, 3, 4 ..	16.7.59	C.P.O.	47	113	27.9.60	29.12.60	552	..
Pitfield Street (Hunslet) Areas 1 and 2 ..	16.7.59	C.P.O.	137	377	3.5.60	17.8.60	47	..
Great Wilson Street Areas 1, 2, 3 ..	16.7.59	C.P.O.	33	105	3.5.60	16.9.60	135	..
Park Row (Kirkstall) Areas 1, 2, 3, 4 ..	16.7.59	C.P.O.	165	373	3.5.60	14.9.60	33	..
Wyther Lane Area ..	16.7.59	C.P.O.	22	63	..	..	..	..
Beeston Royds Areas 1 and 2 ..	16.7.59	C.P.O.	25	52	..	..	..	..
Leathley Road Areas 1 and 2 ..	17.9.59	C.P.O.	24	64	..	28.9.60	25	..
					..	..	..	..

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.



## SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Johnston Street Area	17.9.59	C.P.O.	45	113	27.9.60	..	..	..
Upper North Street Area	17.9.59	C.P.O.	125	313	27.9.60	..	..	4
Scotland Mill Cottages Areas 1 and 2	17.9.59	C.P.O.	6	14	..	..	..	..
Hanover Street (Park Lane) Areas 1 and 2	17.9.59	C.P.O.	45	158	..	..	..	..
Kendal Terrace (Kendal Lane) Area	17.9.59	C.P.O.	75	197	..	..	..	..
Bedford Place (Park Lane) Areas 1, 2, 3, 4	17.9.59	C.P.O.	53	135	..	..	..	..
Park Row (Kirkstall) Area No. 5	15.10.59	C.P.O.	5	12	..	..	..	..
Woodhouse Cliff Areas 1, 2, 3, 4	15.10.59	C.P.O.	60	159	..	..	..	..
Chapel Allerton (Town Street) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10	15.10.59	C.P.O.	120	232	..	..	..	..
Byron Street (North Street) Areas 2, 3, 4	15.10.59	C.P.O.	53	50	..	..	..	16
Belgrave Street (Wade Lane) Areas 1 and 2	15.10.59	C.P.O.	23	31	..	..	..	..
Cross Stamford Street (Newtown) Areas 1 and 2	15.10.59	C.P.O.	68	188	..	..	..	9
Melbourne Street (North Street) Area	15.10.59	C.P.O.	32	88	..	..	..	..
Kirkstall Road (West) Areas 1 and 2	19.11.59	C.P.O.	689	1,932	..	..	..	12
Becroft Street (Kirkstall) Areas 1, 2, 3, 4 and 5	19.11.59	C.P.O.	184	384	..	..	..	4
Town Street (Bramley) Clearance Areas Nos. 1 to 34	18.2.60	C.P.O.	393	878	..	..	..	..
Hugh Street (Tong Road) Clearance Areas Nos. 1 and 2	17.3.60	C.P.O.	193	537	..	..	..	..
Radnor Street (Wellington Road) Clearance Area	17.3.60	C.P.O.	86	211	..	..	..	..
Burmantofts (Burns Street) C.A.	21.4.60	C.P.O.	509	1,348	..	..	..	..
Oban Square (Armley) Clearance Areas Nos. 1 and 2	19.5.60	C.P.O.	50	90	..	..	..	..

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.

## SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued.

Area	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Bedford Terrace (Sheepscar) Clearance Areas Nos. 1 and 2 .. ..	19.5.60	C.P.O.	60	165	..	..	..	..
Springfield Place (Little Woodhouse) C. Areas. Nos. 1 to 6 .. ..	14.7.60	C.P.O.	203	965	..	..	..	..
Rothsay Street (Elland Road) C. Areas Nos. 1 to 5 .. ..	15.9.60	C.P.O.	99	242	..	..	..	..
Springfield Place (Little Woodhouse) C. Areas Nos. 7 to 9 .. ..	15.9.60	C.P.O.	302	1,212	..	..	..	..
Leek Street (Hunslet) C. Areas Nos. 1, 2, and 3 .. ..	14.11.60	C.P.O.	394	1,048	..	..	..	..
Sackville Street (Sheepscar) C. Areas Nos. 1 to 4 .. ..	14.11.60	C.P.O.	294	758	..	..	..	..
Woodbine Square (Little Woodhouse Street) Clearance Area ..	14.11.60	C.P.O.	23	57	..	..	..	..
Grove Road (Hunslet) C.A. ..	14.12.60	C.P.O.	264	790	..	..	..	..
St. George's Terrace (Camp Road) C. Areas Nos. 1 to 4 .. ..	14.12.60	C.P.O.	41	183	..	..	..	..

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.



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# Food Hygiene

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**FOOD INSPECTION**

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

*Chief Public Health Inspector*

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In 1960, 5,019 visits were paid by public health inspectors to premises in which foodstuffs intended for human consumption were prepared, stored or sold. 1,229 of these were to premises registered with the Local Authority under the provisions of Section 16 of the Food and Drugs Act, 1955, i.e. to premises used for the sale or manufacture or storage of ice-cream or the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale.

3,790 other visits were to places not registered under the Food and Drugs Act, i.e. places such as bakehouses, restaurants, cafes, canteens, butchers' shops, provision merchants, etc.

During the year the Food Hygiene Regulations, 1955, were superseded by the Food Hygiene (General) Regulations, 1960, and a considerable amount of work in respect of food premises was done under these Regulations. 138 warning letters were issued pointing out contraventions of the Regulations or to require alterations to premises to bring them into line with modern standards. These letters and other action taken by public health inspectors have resulted in a large number of improvements to food premises of all types. Details of this work are contained in the table of work done by public health inspectors printed on page 222.

**Restaurants and Cafes.**—249 visits have been paid to cafes and restaurants during the year and it was found that the general standard of hygiene has been maintained at a reasonably satisfactory level.

Offences not thought to warrant the institution of legal proceedings have been dealt with by immediate contact with the proprietors of the premises concerned.

The public health inspectors who visit factories and workplaces inspect also, as a matter of routine, the canteens and messrooms provided in these places. These again must conform to the provisions of the Food Hygiene Regulations if food is prepared for sale.

Under the provisions of the Food Hygiene Regulations, 1955, and the Food Hygiene (General) Regulations, 1960, 86 deficiencies were dealt with which related to the following :—

Unsuitable or insufficient sanitary conveniences for use of staff of food premises .. .. .	8
Lack of constant supply of hot and cold water or of hot water at a suitable controlled temperature to sinks of wash hand basins .. .. .	12
Provision of washing facilities for persons handling food .. .. .	6
Unsuitable and insufficient first-aid equipment ..	8
Inadequate provision for suitable storage of outdoor clothing of persons engaged in the handling of food .. .. .	4
Unsuitable and insufficient facilities for washing food and equipment—sinks, etc. .. ..	6
Insufficient and unsuitable means of ventilation of foodrooms .. .. .	8
Defective or unsatisfactory walls, floors, ceilings, etc., of foodrooms .. .. .	4
Dirty condition of floors, walls, ceilings, etc., of foodrooms .. .. .	20
Inadequate food storage .. .. .	3
Other defects found .. .. .	7

Conditions in industrial canteens have continued to improve. Certain structural alterations have been made and new equipment has been provided; the standard of hygiene continues to be comparable with those in commercial kitchens where food is prepared for sale to the general public.

**Ice-Cream Premises.**—During the year 526 visits were made to the premises in the city which are used for the manufacture and sale of ice-cream.



**Other Registered Food-Preparing Premises.**—During the year 293 visits were made to other registered food-preparing premises such as those used for the manufacture of sausage or preparation of pork products, meat pies, jams, pickles and sauces. Eleven applications for registration of premises used for one or other of those purposes were granted, subject in three cases to the carrying out of works of alteration to the premises.

Statistics with regard to the registration of premises under Section 16 of the Food and Drugs Act, 1955, are set out in the following table :—

## REGISTRATION

Number of premises registered for the manufacture of ice-cream during 1960 .. .. .	..
Number of premises registered for storage of ice-cream during 1960 .. .. .	2
Number of premises registered for the sale of ice-cream during 1960 .. .. .	78
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale .. .. . (2 fried fish shops, 8 manufacturers of sausages, potted meat, meat pies, etc.)	10
Number of notifications of change of occupier received :— ice-cream premises .. .. .	40
food-preparing premises .. .. .	13
Number of premises removed from register :— Ice-cream premises (manufacture) .. .. .	1
Ice-cream premises (storage) .. .. .	1
Ice-cream premises (sale) .. .. .	11
Food preparing premises .. .. .	6
Number of premises on the register 31st December, 1960 :— (a) used for manufacture of ice-cream .. .. .	42
(b) used for the sale of ice-cream .. .. .	1,802
(c) used for the storage of ice-cream intended for sale .. .. .	9
(d) used for the manufacture of sausages, or preparation of preserved food .. .. .	778

**Fish-Frying Premises.**—The number of visits paid to registered fish-frying premises was 410. Three applications for registration were approved during the year, subject in one case to the carrying out of works of alteration to the premises.

**Transport and Handling of Meat.**—The condition of vehicles used for the transportation of meat has continued to be reasonably satisfactory during the year.

**Transport of Fish.**—The continued use of non-returnable boxes has made a great improvement in the hygienic condition of fish boxes.

**Legal Proceedings.**—*Food Hygiene Regulations, 1955: Food Hygiene (General) Regulations, 1960.*—(i) An employee of a "Hot Dog" street vendor was prosecuted for failure to observe personal cleanliness in relation to the food handled. The defendant was fined £1. The employer escaped prosecution by reason of his unavailability, being in detention elsewhere in relation to other offences.

(ii) A seller of food from a mobile street barrow was prosecuted for smoking while handling food. A £10 fine was imposed.

(iii) A butcher was prosecuted for carrying meat without a protective head covering being worn, a fine of £5 being imposed in this case.

(iv) The owner of a butcher's shop was prosecuted for smoking in a food room and was given a conditional discharge.

**Food Sampling.**—Supervisory Inspector H. Long reports that the inspectors in the Food and Dairies Section took 93 formal and 569 informal samples of food and 2 formal and 73 informal samples of drugs during the course of the year for the purpose of chemical analysis. Legal proceedings were instituted in a number of cases in accordance with the details set out on page 182. Offences other than those made the subject of prosecutions were taken up with the manufacturers or other persons concerned.

One of the cases in which legal proceedings were taken concerned an offence against the Colouring Matter in Food Regulations, 1957.

In this case the article consisted of a toy "sweet shop". Each "shop" had six small bottles, each containing a different type of sweet. Analysis showed that the contents of the bottles consisted of sugar crystals, to which a colouring matter had been added. In one bottle, the sugar was found to have been coloured with a non-permitted colouring matter, thus infringing the Regulations. The colour present was Brilliant Blue FCF, an item classified under Category C in the Food Standards Committee Reports on Colouring Matter of 1954 and 1955, namely, colours which have been shown to possess, or are suspected of possessing, harmful effects on health. The case was heard before the Leeds City Magistrates' Court, the Company being given an absolute discharge on payment of 65s. costs. An undertaking was also given by the defendants to withdraw existing stocks.

In the first half of the year Leeds was one of the Authorities requested to make a special survey of the composition of meat pies. The results were forwarded to the Ministry of Agriculture, Fisheries and Food for the information of the Food Standards Committee. A total number of 102 pies were analysed. The meat content varied from a minimum of 16.0 per cent. to a maximum 58.0 per cent. The average meat content of all the samples analysed was 27.6 per cent. Of the total number, 8 pies containing less than 20 per cent. meat were classified as unsatisfactory. From the overall picture, several general conclusions may be drawn. It is evident that the larger pies contain a greater percentage of meat and that there is a wide variation of meat content in pies of the same size and price. Pork pies retailing at 7d. had meat contents varying between 16.0 per cent. and 34.0 per cent. It was also demonstrated that pies having the description of "Steak Pie" or "Steak and Kidney Pie" contained a greater proportion of lean meat than pork pies.

One of the unsatisfactory samples was "Shrimp Slices". This product, imported from Hong Kong, was made from tapioca with 8.0 per cent. shrimp. The label was misleading and also failed to specify the ingredients (as required by the Labelling of Food Order, 1953). Extensive enquiries were made to find the supplier. The address given for the wholesaler was, however, found to be non-existent, and, despite repeated efforts, the firm concerned could not be contacted.

**Ice-Cream Sampling.**—During the year 48 samples of ice-cream were taken for bacteriological examination, the samples being taken from the places of manufacture and from local vendors. Of this number, 11 samples were classified as unsatisfactory and 8 as very unsatisfactory. The results were, in each case, notified to the vendors and manufacturers. Where unsatisfactory results were indicated, visits were paid to the premises of production to advise on corrective methods.

Details of the bacteriological results are as follows :—

#### METHYLENE BLUE TEST

Grade	No. of Samples	Percentage	Remarks
1	21	43·7	Good
2	8	16·7	Satisfactory
3	11	22·9	Unsatisfactory
4	8	16·7	Very unsatisfactory

**Bacteriological Examination of Food.**—Routine bacteriological examination has been carried out during the year on a variety of foodstuffs, 106 samples having been submitted to the Public Health Laboratory Service for this purpose. Details of the commodities thus submitted are as follows :—

Article	No. of Samples Submitted
Gelatine .. .. .	14
Gum Acacia .. .. .	7
Gum Karaya .. .. .	6
Agar-agar .. .. .	4
Desiccated coconut .. .. .	4
Pasteurised spray dried hen egg yolk ..	1
Pork pie .. .. .	6
Meat pie .. .. .	1
Potted meat .. .. .	5
Iced Lolly .. .. .	1
Canned Ham .. .. .	5

*Continued on next page*

Beef sausage .. .. .	13
Tinned pork shoulder .. .. .	1
Boiled ham .. .. .	1
Minced beef .. .. .	1
Roast pork .. .. .	1
Beef .. .. .	1
Sausage roll .. .. .	1
Cream buns .. .. .	2
Cream slice .. .. .	1
Tinned corned beef .. .. .	1
Salmon paste .. .. .	1
Skinless pork sausage .. .. .	1
Steak and Kidney pie .. .. .	1
Pork sausages .. .. .	4
Luncheon meat .. .. .	1
Cocoa Curl .. .. .	1
Chocolate Eclair .. .. .	1
Sugar cream buns .. .. .	2
Cream Split .. .. .	1
Cream fruit pie.. .. .	1
Synthetic cream horn .. .. .	1
Beef sausage meat .. .. .	1
Tinned sandwich ox tongue .. .. .	1
Liver sausage .. .. .	2
Salami .. .. .	5
Hungarian boiling sausage .. .. .	1
Smoked pigs ribs .. .. .	1
Lemon Sorbet .. .. .	1
Strawberry Ice .. .. .	1
Orange Sorbet .. .. .	1

**Extraneous Matter in Food.**—The number of complaints submitted to the Department by members of the public with regard to extraneous matter in food was slightly higher than in the preceding year. During the year the following extraneous matter has been found in food :—

Machine grease in bread loaves  
 Paper in steak and kidney pie  
 Metal fragments in tinned apricots

*Continued on next page*

- "Insect" in bottle of Real Minced Chicken  
 (this proved to be a feather)  
 Insect in jar of beetroot  
 Large pin in teacake  
 Fragment of pig pre-molar tooth in bread cake  
 1½" nail in bread loaf  
 Insect in tin of fruit salad  
 Insect adhering to bread loaf  
 Small moth in cocoa bun  
 Insect in tin of corned beef  
 Thistles in bottle of milk  
 Powdered metal in gooseberry pie  
 Maggots in frozen rabbit  
 Metal spring in pie  
 \*Glass in apple square  
 Larvae in orange cream chocolate  
 Insect in bottle of sherry  
 \*Glass in fish and chips  
 Aluminium cap in bottle of milk  
 Glass in vegetable salad

Action appropriate to the various circumstances was taken in respect of each of the above complaints, legal proceeding being instituted in two cases (indicated by an asterisk in the above list).

**Legal Proceedings.**—The following table sets out details of prosecutions taken during the year in connection with samples of food found to contain extraneous matter.

Article	Extraneous Matter	Result of Hearing
Apple square ..	Contained piece of glass	Fined £5. Confectioner-Baker.
Fish and chips ..	Contained piece of glass	Fined £10. Retailer.

**Fertilizers and Feeding Stuffs Act, 1926.**—During the year 9 formal and three informal samples of fertilisers were taken under the Fertilisers and Feeding Stuffs Act, the samples being submitted to the Agricultural Analyst for examination. Two of these samples were classified as unsatisfactory by analysis or by reason of some non-compliance with the provisions of the Act. In both cases the matter was taken up with the manufacturer concerned.



**Rag Flock and Other Filling Materials Act, 1951.**—During the year the licences of three premises used for the manufacture of rag flock and one for the storage of rag flock were renewed. The total number of registered premises in the city remains at 55. Four samples, consisting of Coir Fibre, Fleece Wool, Cotton Felt and White Hair were taken during 1960. Each of these samples proved to be satisfactory, the manufacturers being notified accordingly.

**Pharmacy and Poisons Act, 1933 (Part II).**—The administrative year for the purposes of the above Act extends from May 1st to April 30th. The work done during the year ended April 30th, 1961, is set out in the following table :—

Persons on the List on 30th April, 1960 .. .. .	351
Persons added to the List during the year .. .. .	21
Persons removed from the List during the year .. .. .	35
Persons on the List on 30th April, 1961 .. .. .	337
Premises on the List on 30th April, 1960 .. .. .	462
Premises added to the List during the year .. .. .	21
Premises removed from the List during the year .. .. .	41
Premises on the List on 30th April, 1961 .. .. .	442
Visits paid to :—	
1. Listed Premises in connection with new applications .. .. .	6
2. Listed Premises in connection with unpaid fees .. .. .	8
3. Listed Premises for routine inspection .. .. .	1
4. Unlisted Premises .. .. .	2
Contraventions :—	
Persons found to be selling Part II Poisons on Unlisted Premises .. .. .	..
Listed Sellers found with incorrectly labelled Part II Poisons in stock .. .. .	..
Contraventions dealt with :—	
Persons ceasing to sell Part II Poisons from Unlisted Premises .. .. .	..
Persons selling Part II Poisons from Unlisted Premises who subsequently applied for listing .. .. .	..
Listed Sellers who have corrected labels found to be not in accordance with requirements as to labelling .. .. .	..

**Legal Proceedings.**—It was not found necessary to institute legal proceedings under the Pharmacy and Poisons Act during the year.

**Pharmacy and Medicines Act, 1941.**—One contravention of this Act came to the notice of the Department during the year, namely that of a Headache and Neuralgia Powder which was accompanied by an inaccurate statement of composition contrary to Section 11 of the Act. The matter was taken up with the manufacturer concerned who agreed to withdraw all existing stocks of this commodity.

## SAMPLING OF MILK.

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

*Chief Public Health Inspector*

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Supervisory Inspector H. Long reports that the sampling officers in the Food and Dairies Section have taken, in all, 3,724 samples of milk for examination. This figure is made up of 2,873 chemical samples, 752 bacteriological samples and 99 biological samples. The chemical samples taken included 83 Channel Island Milks.

The average composition of all milks submitted for chemical analysis was :— total solids—12·48 per cent., non-fatty solids—8·73 per cent., fat— 3·75 per cent. 51 of the samples submitted for chemical analysis proved to be unsatisfactory. The City Analyst reported that 16 of these contained added water, 27 showed a fat deficiency and 7 were fat deficient and contained added water. One sample, though chemically normal, was contained in a dirty bottle.

**Adulterated Milk.**—Legal proceedings were taken against two farmers in respect of samples containing added water. In the first case, three counts were taken in respect of churns of milk found to contain 12·6 per cent., 14 per cent. and 11·6 per cent. added water and the defendant was fined £5 on each of three charges. In the second case, four charges were made in respect of churns found to contain 10·8 per cent., 12·8 per cent., 10·1 per cent. and 12·8 per cent. added water. The defendants were found guilty and fined a total of £24. A summary of the prosecutions taken in respect of milk samples is included in the table on page 182.

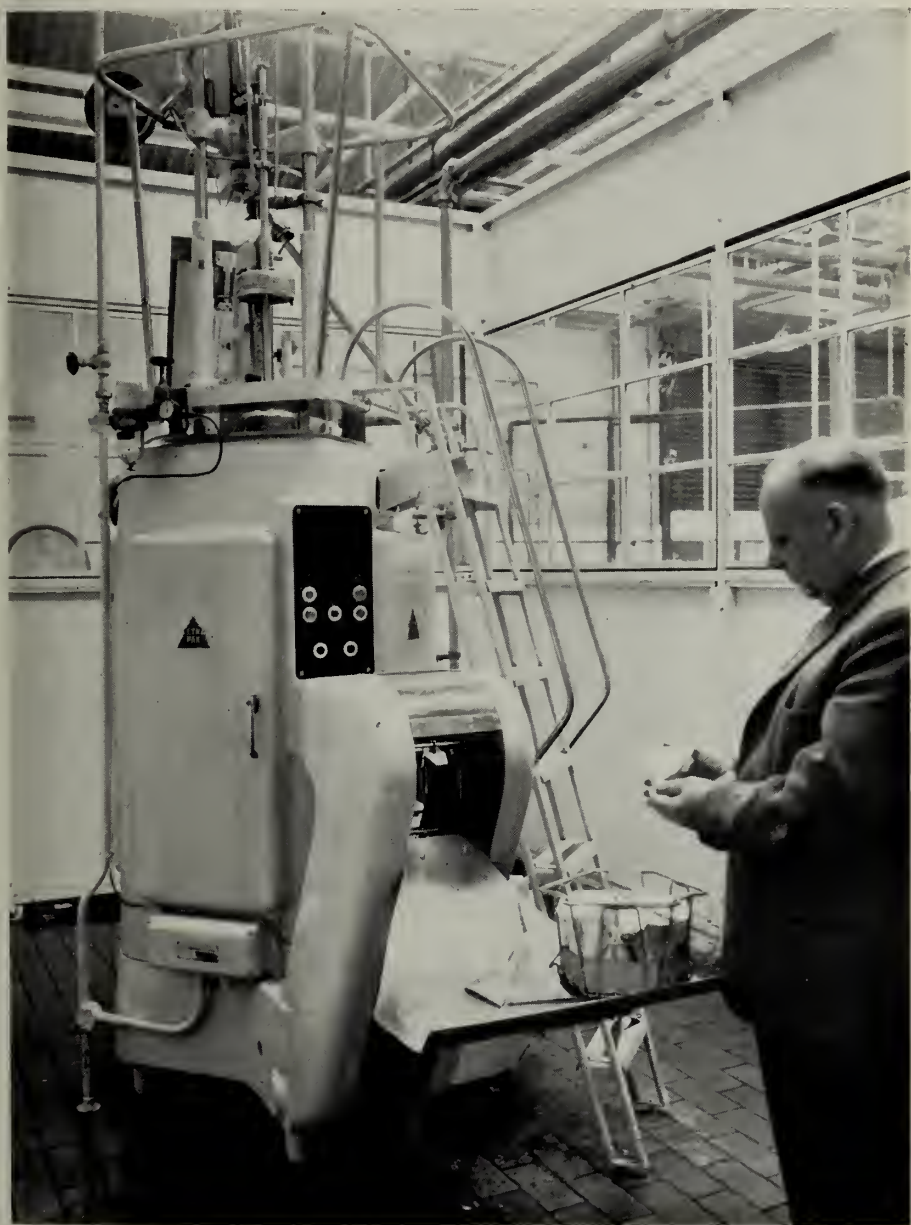
The greatest fat deficiency found during the year amounted to 53·3 per cent. This related to one churn of milk in a consignment of 12 churns from the same farmer. Ten of these were fat deficient. The average deficiency over the whole consignment was 26 per cent. Appeal-to-cow samples were taken and it was found that these were also seriously fat deficient. This exonerated the farmer from

any question of deliberate skimming of the milk. Following these results, the farmer was interviewed and the National Agricultural Advisory Service of the Ministry of Agriculture, Fisheries and Food were notified.

**Distribution of Milk.**—The situation with regard to the treatment and distribution of milk within the city has undergone little change during the year. One development, however, was the completion of the new premises and processing plant in Kirkstall Road belonging to a large wholesale dairy firm. The new premises were built to replace existing dairies in two separate locations.

In a previous Annual Report reference was made to the sale of milk in cartons and the development of such methods was welcomed. A large private company in the city has now introduced the sale of milk in non-returnable containers in all their shops in the centre of the town. This has greatly reduced the nuisance which formerly occurred as a result of the depositing of empty milk bottles in the street. The introduction of this method is a step forward towards the ultimate goal of all milk being supplied in non-returnable containers. Discussion with the trade has revealed that economic factors alone have prevented large-scale development of this practice. Expenditure in connection with the installation of new plant would be heavy in the initial stages but this would be offset to some extent by the saving of time and labour at present expended in the collection and washing of the returnable bottles.

The introduction of the Milk (Special Designation) Regulations, 1960, which came into operation on 1st October, gave the Department the opportunity of discussing the various problems which have arisen in the distribution of supplies with all members of the milk trade. Several evening meetings were arranged, where members of the staff gave a resume of the conditions being applied by the new Regulations. Arising from these discussions a new system of centralised distribution has been introduced. Cold storage depots at suitable sited points are now being constructed and consultations between the Dairy Companies, the Town Planning Authority and this Department are taking place as to the suitability of other suggested sites. When these depots have been completed the number of complaints with regard to noise nuisance from the delivery of crates of milk



### CARTON MACHINE

This machine makes cartons from rolls of specially prepared paper and fills and seals each carton. The public health inspector is examining the date of sealing which is printed on each carton. This machine is used at a Leeds dairy for filling orange squash into cartons. This type of machine could also be used for filling milk into non-returnable cartons.





should be greatly reduced. It is not often that the nuisance caused by such noise is fully realised. In order to convince the dairy companies of this problem the inspectorial staff have taken sound-recording readings throughout the night. On being shown these figures and charts the distributors were surprised and expressed concern at the disturbance occasioned by heavy lorries delivering milk in the early hours. The Dairies have co-operated fully in this matter and are now most anxious to provide these proper depots for regional distribution of milk.

**Dairy Inspection and Milk Sampling.**—The following visits were paid during the year by the Food and Drugs Inspectors :—

To dairies .. .. .	556
To pasteurising and sterilising plants .. ..	157
To bottled milk shops .. .. .	20
Other visits of enquiry .. .. .	577
No access visits .. .. .	39
Attendance at Court .. .. .	15
Visits in connection with adulterated samples..	43

During the year, 752 samples of milk were submitted to the City Analyst for bacteriological examination. The samples were taken from dairies, schools and retailers in the streets. They were taken from the following grades of milk :—

" Pasteurised " .. .. .	183
" Tuberculin Tested " (Pasteurised) .. ..	194
" Sterilised " .. .. .	121
" Tuberculin Tested " (Farm Bottled) .. ..	254

**Bacteriological Examination of Milk.**—Of the 752 samples submitted to the City Analyst for bacteriological examination, 4 failed to pass the methylene blue test and 2 the phosphatase test.

#### TURBIDITY TEST.

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent- age	No.	Percent- age
Sterilised .. .. .	97	97	100·0	..	..



## METHYLENE BLUE (REDUCTION) TEST.

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent-age	No.	Percent-age
*Pasteurised { Dairies ..	98	98	100.0	..	..
{ Schools ..	85	85	100.0	..	..
*Tuberculin Tested { Dairies ..	194	194	100.0	..	..
(Pasteurised) { Schools ..	..	..	..	..	..
†Tuberculin Tested (Farm bottled) Dairies ..	278	274	98.6	4	1.4

\*Satisfactory samples not to decolourise Methylene Blue at 37°C. in 30 minutes.

†Satisfactory samples not to decolourise Methylene Blue at 37°C. in 4½ hours, May to October, or 5½ hours, November to April.

## PHOSPHATASE TEST.

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent-age	No.	Percent-age
Pasteurised { Dairies ..	99	99	100.0	..	..
{ Schools ..	84	84	100.0	..	..
Tuberculin Tested { Dairies ..	194	192	99.0	2	1.0
(Pasteurised) { Schools ..	..	..	..	..	..

Satisfactory samples not to give colour reading of more than 2.3 Lovibond Blue Units.

**Dairies and Milk Sellers.**—The following tables show the number of registered dairies and milk sellers in the city:—

## DISTRIBUTORS OF MILK AND DAIRY PREMISES.

	Dairies	Distributors of milk
No. on the register on 31st December, 1959 ..	28	32
No. added to the register during the year ..	..	..
No. removed from the register during the year ..	1	1
No. on the register on 31st December, 1960 ..	27	31

## DISTRIBUTORS OF BOTTLED MILK ONLY.

No. of distributors of milk on the register on 31st December, 1959.. .. .	896
No. added to the register during the year .. .. .	117
No. removed from the register during the year.. .. .	144
No. of distributors of milk on the register on 31st December, 1960 .. .. .	869
No. of shops, etc., from which bottled milk only is sold, on 31st December, 1960 .. .. .	1,125

## LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATION) REGULATIONS, 1949-1954.

Description	Number in force on 31st December		
	1958	1959	1960
To use the designation "Tuberculin Tested"—			
1. To sell by retail .. .. .	156	160	150
To use the designation "Pasteurised"—			
1. Pasteurisers' Licences .. .. .	5	4	3
2. To sell by retail .. .. .	174	173	159
To use the designation "Sterilised"—			
1. Sterilisers' Licences .. .. .	2	2	2
2. To sell by retail .. .. .	1,063	1,091	1,073

**Biological Examination of Milk.**—During the year 99 samples of milk were submitted to the Public Health Laboratory Service at Leeds for biological examination for the presence of tubercle bacilli. The results are shown in the following table:—

Designation	Total Samples Taken	Result of Test			
		Positive		Negative	
		No.	Percentage	No.	Percentage
Tuberculin Tested ..	76	..	..	76	100.0
Pasteurised.. .. .	..	..	..	..	..
Tuberculin Tested (Pasteurised) .. .. .	..	..	..	..	..
Ungraded .. .. .	23	..	..	23	100.0
Total .. .. .	99	..	..	99	100.0

**The Milk and Dairies (General) Regulations, 1959—Regulation 20**—It was not found necessary to serve any notices under the above-mentioned Regulation during the year.

SUMMONSES ISSUED DURING 1960 UNDER THE FOOD AND  
DRUGS ACT, 1955

No. of Sample	Article	Adulteration or Deficiency.	Result of Hearing
218/A	Buttered Teacake	Spread with mixture of 90% margarine and 10% butter	Fined £5 and ordered to pay £2 10s. costs. Retailer.
219/A	Buttered Teacake	Spread entirely with margarine	Fined £5 and ordered to pay £2 10s costs. Retailer.
333/A	Milk	12.6% added water	} Fined £15
342/A	Milk	14.0% added water	
343/A	Milk	11.6% added water	
210/W	Milk	10.5% added water	} Fined £24 and ordered to pay £5 12s. costs. Producer.
217/W	Milk	12.8% added water	
219/W	Milk	10.1% added water	
231/W	Milk	12.8% added water	} Fined £2 and ordered to pay £2 10s. costs. Manufacturer.
575/W	Beef	20% deficient in meat content	
	Sausage		
845/W	Beef	30% deficient in meat content	Fined £10 and ordered to pay £2 10s. costs. Manufacturer.
	Sausage		} Absolute discharge on payment of £3 5s. costs. Manufacturer.
648/R	"Tom Tucker" Sweet Shop	Contained a non-permitted colouring matter, viz. Brilliant Blue FCF	

## MEAT INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

*Chief Public Health Inspector*

Statistical data in this section of the Report has been compiled from reports submitted by Mr. D. Forbes, Supervisory Public Health Inspector for Meat and Other Foods.

**Animals Slaughtered.**—During the year 277,605 animals were slaughtered for human consumption at the Public Abattoir and the private slaughterhouses in the city, a decrease of 2,518 on the figure for 1959. The following table gives an analysis of the animals slaughtered for human consumption at the Public Abattoir and the private slaughterhouses.

### ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR AND PRIVATE SLAUGHTERHOUSES.

	Year	Cattle ex. Cows	Cows	Calves	Sheep	Pigs	Total
Public Abattoir ..	{ 1959	21,771	9,267	14,905	160,271	19,029	225,243
	{ 1960	25,349	9,281	22,748	141,295	22,199	220,872
Danube Road ..	{ 1959	4,166	..	..	10,348	10,094	24,608
	{ 1960	3,917	..	..	9,855	10,300	24,072
26, Gelderd Road ..	{ 1959	14	..	..	1,187	19,347	20,548
	{ 1960	932	15	237	4,261	19,642	25,087
Marshall Street, Cross- gates	{ 1959	223	..	1	1,518	1,810	3,552
	{ 1960	191	..	5	1,073	1,334	2,603
Cross Lane, Wortley	{ 1959	246	158	..	2,335	..	2,739
	{ 1960	234	95	..	1,204	..	1,533
Harrison's Yard, Bramley ..	{ 1959	..	..	..	190	3,243	3,433
	{ 1960	..	..	..	..	3,438	3,438

It can be seen from the foregoing table that the number of bovine animals slaughtered for human consumption has increased from 50,751 in 1959 to 63,004 in 1960. Corresponding variations in the individual classes of animals slaughtered were as follows:— increases: cattle (excluding cows) 4,203, calves 8,084, pigs 3,390; decreases: cows 34, sheep and lambs 18,161.

**Slaughterhouses.**—The licences of five private slaughterhouses were renewed during the year, namely those belonging to the Leeds Industrial Co-operative Society, Limited, Danube Road, Leeds; T. Adamson and Sons, 16, Gelderd Road, Leeds; Mrs. S. U. Wilson and H. Lunn (trading as Wilson's), Marshall Street, Leeds, 15; C. H. and J. W. Ellison, Cross Lane, Wortley, Leeds; and E. Taylor, Harrison's Yard, Bramley, Leeds.

These five private slaughterhouses have been conducted satisfactorily throughout the year.

**Licensing of premises used for the confinement of animals awaiting slaughter.**—In accordance with the provisions of Section 63(2) of the Food and Drugs Act, 1955, applications were received for the grant and renewal of the licences of two sets of premises used for the confinement of animals awaiting slaughter at a slaughterhouse, namely, Leeds Industrial Co-operative Society Limited (lairage in Gelderd Road) and premises in York Road, being fields in the occupation of Messrs. Wilson. The licences were granted in each case.

**Knacker's Yard.**—There is only one knacker's yard in the city, that belonging to Mr. J. R. C. Wilkinson at 133, Carr Moor Side, Hunslet. The premises were well maintained and the knacker's yard was conducted in a satisfactory manner; the licence for its operation was accordingly renewed. The return required to be rendered under the Slaughter of Animals (Prevention of Cruelty) Regulations, 1958, showed the number of horses dealt with to be in accordance with the following table:—

	1959	1960
Horses slaughtered at the knacker's yard	8	8
Horses slaughtered at collieries ..	45	47
Horses slaughtered at farms and customers' own premises .. ..	22	11
Horse carcases received .. ..	32	34





Photograph taken at a private slaughterhouse at Crossgates, Leeds, which was reconstructed to bring it into conformity with the requirements of the Slaughterhouse (Hygiene) Regulations, 1958, and the Slaughter of Animals (Prevention of Cruelty) Regulations, 1958. Note the stunning pen to the right of the picture. The inspector is engaged in the examination of the glands of the carcass of a pig, having completed the inspection of the plucks in the background.





**Slaughter of Animals Act, 1958.**—During the year 5 new licences to slaughter or stun animals were granted by the City Council and 135 were renewed.

**Whole and Part Carcasses condemned.**—The following table shows the different species of animal and the number of whole carcasses or parts condemned for tuberculosis, cysticercosis and other diseases.

CARCASSES INSPECTED AND CONDEMNED.

	Cattle (exclud- ing cows)	Cows	Calves	Sheep and Lambs	Pigs	Horses
NUMBER KILLED ..	30,623	9,391	22,990	157,688	56,913	..
NUMBER INSPECTED ..	30,623	9,391	22,990	157,688	56,913	..
<b>ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCOSIS</b>						
Whole carcasses con- demned .. ..	16	76	149	295	81	..
Carcasses of which some part or organ was condemned .. ..	2,676	849	15	10,375	3,104	..
Percentage of numbers inspected affected with diseases other than Tuberculosis and Cysticerci ..	8.79	9.85	0.71	6.77	5.60	..
<b>TUBERCULOSIS ONLY</b>						
Whole carcasses con- demned .. ..	21	9	..	..	4	..
Carcasses of which some part or organ was condemned .. ..	431	120	..	..	452	..
Percentage of numbers inspected affected with tuberculosis ..	1.48	1.37	..	..	0.80	..
<b>CYSTICERCOSIS</b>						
Carcasses of which some part or organ was condemned .. ..	17	2	..	..	..	..
Carcasses submitted to treatment by refrig- eration .. ..	..	..	..	..	..	..
Generalised and totally condemned .. ..	..	..	..	..	..	..

**Tuberculosis.**—The incidence of tuberculosis in cattle slaughtered in Leeds has fallen remarkably since October 1st, 1959, when the Tuberculosis (Northern England Attested Area) Order, 1959, came into force.

As regards those bovine animals found to be affected with tuberculosis, 90 per cent. were Irish cattle licensed direct to the Abattoir.

Infection in home-bred animals is reported to the Ministry of Agriculture, Fisheries and Food in order that the source may be traced and dealt with.

**Cysticercus Bovis and Ovis.**—Inspection continued in the approved manner during the year in connection with the detection of these conditions. 17 bullocks and 2 cows were found to be infested with this parasite. In no case was refrigeration considered necessary. A further reduction in the number of cases was observed.

**The Slaughterhouses (Meat Inspection Grant) Regulations, 1958.**—The number of animals slaughtered in Leeds is in excess of the requirements of the city's population. This fact is indicated in the following table which sets out the statistics for the 12 months ending 31st March, 1961, upon which an application for a meat inspection grant was based :—

		1957-8	1958-9	1959-60	1960-61
Total units inspected	..	972,906	906,895	909,150	966,322
*Datum figure	..	765,150	767,400	769,950	772,140
Export figure	..	207,756	139,495	139,200	194,182

\*Datum figure based upon population  $\times 1.5$  caput figure.

**Meat and Other Foods condemned as unsound.**—The total weight of food destroyed by consent during the year was 433,737 lbs. as compared with 475,867 lbs. in the previous year. Details of food destroyed are given in the following table.

## MEAT, ETC., DESTROYED BY CONSENT.

	1960	1959	1958	1957
Beef .. ..	66,438 lbs.	94,203 lbs.	116,527 lbs.	124,296 lbs.
Veal .. ..	6,045 "	5,649 "	5,699 "	5,763 "
Mutton .. ..	16,730 "	25,701 "	15,378 "	15,053 "
Pork .. ..	18,524 "	18,973 "	22,366 "	27,062 "
Bacon and Ham ..	773 "	313 "	813 "	232 "
Offals.. ..	109,739 "	145,669 "	188,165 "	184,900 "
Rabbits .. ..	282 "	1,467 "	804 "	715 "
Poultry .. ..	715 "	1,476 "	858 "	770 "
Game.. ..	84 "	509 "	37 "	26 "
Fish .. ..	9,905 "	16,123 "	13,744 "	21,518 "
Shellfish .. ..	6,596 "	714 "	127 "	3,184 "
Vegetables .. ..	117,780 "	96,938 "	67,702 "	38,413 "
Fruit .. ..	23,065 "	16,787 "	9,848 "	14,224 "
Tinned goods .. ..	50,835 "	46,363 "	49,086 "	51,576 "
Cheese .. ..	223 "	70 "	57 "	124 "
Edible fungi .. ..	74 "	304 "	..	..
Bread and Cereals ..	..	479 "	1,214 lbs.	..
Flour .. ..	1,605 lbs.	140 "	..	..
Confectionery .. ..	51 "	..	138 lbs.	378 lbs.
Sundries .. ..	4,273 "	3,989 lbs.	19,898 "	3,267 "
Totals .. ..	433,737 lbs.	475 867 lbs.	512,461 lbs.	491,501 lbs.

**Disposal of Condemned Food.**—Throughout the year the wholesale butchers disposed of their own condemned carcasses, this material being consigned to the firm of C. and B. Animal By-Products, Limited, of Wakefield. Bones, together with sheep and calf heads, are now disposed of to Messrs. A. Schofield (Pontefract) Limited. In both cases the firms use the condemned material for the manufacture of meat meal for consumption by animals and for use as fertiliser. All condemned meat and offal were stained with vegetable dye before leaving the premises of slaughter.

All other condemned food, including tinned goods, fruit and vegetables were disposed of by incineration at the Corporation Destructors.

**Fish.**—No great changes in the conduct of the retail fish trade were observed during the year. On the whole, the quality of the fish arriving at the Market continued to be satisfactory.

**Shellfish.**—Ten samples of mussels were taken during the year for the purpose of bacteriological examination. Two of these samples

were of Danish origin, two originated from the Wash area (River Welland) and six from Welsh sources (having been consigned from Chester and Bangor). Five samples proved to be satisfactory, two fairly satisfactory and three unsatisfactory. In the case of the unsatisfactory samples, the matter was taken up with the suppliers. In two cases, namely those relating to samples from the Boston area and from Conway (the latter having been consigned from Chester) the matter was made the subject of a Report to the Health Committee culminating in a resolution that the fishmongers concerned be required to furnish a list of layings from which their supplies of shellfish had been derived during the previous six weeks.

Investigations are, at the time of writing, still proceeding with regard to the Boston samples. These layings have, meanwhile, been voluntarily closed by the Sea Fisheries Joint Committee as a result of action taken by this Department. With regard to the mussels from Chester, the retailers in Leeds Market have agreed that they will restrict their acceptance of supplies from the consignor in question to those that have been through a recognised local purification plant.

In the case of the third unsatisfactory sample, the matter was again taken up with the supplier. In this case the firm sent a representative to this Department, their attitude being most co-operative and helpful. Following correspondence with the Ministry of Agriculture, Fisheries and Food, it was decided that the firm normally produced a sound product and that no further action was necessary.

**Salmon and Freshwater Fisheries Act, 1923.**—An anonymous letter was received during the year to the effect that immature salmon kelts were being exposed for sale in the City Market. No evidence to substantiate the complaint was found and, following consultation with the Yorkshire Ouse River Board (who are also authorised to act under the 1923 enactment) it was agreed that the matter be kept under review in liaison with the Board's Fisheries Officer.

**Rabbits.**—The quality of rabbits arriving in the city has continued to be fairly satisfactory. Quantities of Chinese and Australian rabbits were among those imported.

**Fruit and Vegetables.**—During the year it was necessary to condemn large quantities of Jersey, Italian, Egyptian and French potatoes by reason of disease, the quantities ranging between 30 tons and  $\frac{1}{2}$  cwt. On another occasion it was necessary to deal with a large quantity of fruit damaged in a road accident. Nine cases of oil-contaminated apples were destroyed following the issue of condemnation certificates.

**Tinned Goods.**—Large quantities of tinned goods of all types were submitted to the Department for condemnation to enable credit to be obtained from the producer. A quantity of fire-damaged goods was transferred from a neighbouring town to a Leeds warehouse by reason of the lack of storage facilities pending inspection at the former town. The material was inspected by the Department staff prior to its disposal. Several tons were found to be bulging and rusty and were accordingly condemned.

**Frozen Liquid Egg.**—Several notifications relating to the consignment of quantities of imported frozen egg to cold stores in the city were received from other local authorities. Samples were taken and submitted for bacteriological examination. Samples of one consignment were taken at the request of the consignee, a large food manufacturer in the city. One quantity of frozen whole hen egg which was known to be infected was released for pasteurisation under the supervision of the Medical Officer of Health for Oldham.



## DISEASES OF ANIMALS

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,  
*Chief Public Health Inspector*

**Tuberculosis Order of 1938.**—No cases of bovines suspected to be affected with tuberculosis were reported during the year.

**Swine Fever Order of 1938.**—During the year under review, eleven cases of suspected swine fever were reported to the Department as compared with one case in the previous year.

The following table sets out some of the relevant details :—

Date of Declaration of Infected Place (Form A)	Name of Pigkeeper and Address of Piggeries	Date of Confirmation of existence of Swine Fever
10.3.60	I. Gibson and Son, East Moor Farm, Leeds, 16. . . . .	15.3.60
26.7.60	F. Pinder, Low Fields Allotments. . . . .	NOT SWINE FEVER
4.8.60	T. A. Nicholson, Church Farm, Leeds, 16. . . . .	15.8.60
25.8.60	Walter Miller, Spetch Yard, Leeds, 13. . . . .	NOT SWINE FEVER
11.10.60	K. and S. Taylor, Westfield Farm, Leeds, 9. . . . .	14.10.60
19.10.60	O. Lister, Black Hill Farm, Leeds, 16. . . . .	NOT SWINE FEVER
30.10.60	Leeds Corporation Cleansing Department, Thorpe Hall Farm . . . . .	1.11.60
7.11.60	H. Hewitt, Cottages adj. Skelton Grange Farm, Leeds . . . . .	10.11.60
15.11.60	T. A. Nicholson, Church Farm, Leeds, 16. . . . .	NOT SWINE FEVER
8.12.60	M. Hirst, Cocker Hill Farm, Otley Rd., Leeds, 16 . . . . .	NOT SWINE FEVER
30.12.60	W. Dyson, 31, Back Lane, Leeds, 12. . . . .	6.1.61

**Regulation of Movement of Swine Order, 1959.**—Under this Order, 183 licences for the disposal of 1,573 swine from the Whitkirk Auction Mart were issued and 284 visits have been paid to pig-keeping premises to ascertain that recently removed store pigs had been detained and isolated for the appropriate period. In addition, 20 licences have been issued for the movement of pigs within the city.

**Anthrax Order of 1938.**—One case of suspected anthrax at the Public Abattoir was reported during the year but subsequent post-mortem examination proved that the animal had died from causes other than anthrax.

**Foot-and-Mouth Disease.**—During the year the city was included in an Infected Area in connection with a locally occurring outbreak of Foot-and-Mouth Disease. Details of this outbreak are given below. In addition to this outbreak the city was on two occasions included within a Controlled Area.

#### “REPORT ON OUTBREAK OF FOOT-AND-MOUTH DISEASE AT EAST KESWICK, HAREWOOD AND DISTRICT.

##### *Notification of Outbreak*

The first intimation of a possible outbreak of foot-and-mouth disease in the West Riding came in the form of a telephone call to the Chief Public Health Inspector during the night of Saturday, October 1st, 1960. Confirmation of the existence of this first outbreak came by telegram on the following day, the telegram being followed by the declaration of a Foot-and-Mouth Disease Infected Area which included the whole of the City of Leeds. This original outbreak occurred at Tevant Farm, East Keswick, some miles from the city confines.

The inclusion of the city within such an infected area involves the implementation of the Foot-and-Mouth Disease (Infected Areas Restrictions) Order of 1938, the provisions of which cover a wide field, conferring considerable powers on the enforcing local authority.

##### *Authorisation of Livestock Movement*

Not the least onerous of the duties falling on this Authority during a Foot-and-Mouth Disease outbreak is that of the responsibility for the Licensing of livestock in transit. It will be appreciated that a very large number of animals are consigned each week to the various slaughterhouses in the city and the task of movement authorisation is very considerable. During the first four weeks of the outbreak no fewer than 1,890 licences were issued covering the transfer of some 26,500 animals. Each movement necessitates individual consideration, many being refused by reason of proximity to infected premises or the imposition of movement restrictions on “contact” farms.

*Erection of warning signs*

By arrangement with the City Police Mobile Division, Infected Area Warning Notices were erected at points on the city boundary coincidental with the limits of the Infected Area in order that livestock transport drivers who might otherwise be unaware of the situation, should have clear notification of their entry into a restricted zone.

*Markets and Sale of Livestock*

No applications for the licensing of a sale or market were received during the restrictions and, consequently, the Whitkirk Auction Mart remained closed during their period of operation.

*Removal of Slaughterhouse Refuse*

Stringent precautions were adopted in connection with the disposal of slaughterhouse refuse, such material representing a potential source of infection. Written permits were issued for the removal of such matter in nine cases during the outbreak.

*Cleansing of vehicles*

As in previous years, the cleansing of vehicles was undertaken at the Victoria Cattle Market in Gelderd Road. One driver who had failed to carry out such cleansing was intercepted by the lay inspector on the York Road. The driver claimed that he had misunderstood his instructions and the matter was dealt with by the issue of a warning letter from the Chief Inspector.

*Restricted Premises within the City*

A number of premises within the city were placed under Movement Restrictions (Form D). In some cases the notices were issued by this Department, in others direct from the Ministry's Foot-and-Mouth Control Centre in Wetherby. Such restrictions are imposed as a consequence of some possible link with infected premises, materials or animals.

*Table A.—Confirmed Outbreaks.*

The following table sets out details of the premises affected by the outbreak :—

Name and Address of Farmer	Date Outbreak Confirmed
M. B. Hemingway, Tevant Farm, East Keswick. . .	2.10.60
Capt. N. A. Ussher, Agent for Harewood Estate Office, Harewood Home Farm, Harewood... ..	10.10.60
T. A. L. Webster, New Laithe Farm, Harewood. . .	11.10.60
W. H. Wellburn, Burns Farm, East Keswick... ..	11.10.60
Mrs. M. E. Walmsley, Carr Farm, Thorner. . .	20.10.60
R. Langrick, "Eastfield", Bayhorse Lane, Shadwell, nr. Leeds. . . . .	24.10.60

*Table B.—Premises in the City under Movement Restrictions*

Name of Farmer and Address of Restricted Premises

H. Wardle, Burden Head Farm, Eccup, Leeds.
O. Lister, Black Hill Farm, Eccup, Leeds.
D. Osborne, White Laithe Farm, Seacroft, Leeds
W. Carter, Providence Farm, Leeds, 14
J. Thackray, Beachwood Farm, Elmete Lane, Leeds, 8.
C. D. Wansbrough, Roundhay Grange, Leeds, 17.
E. D. Oddy, Lazencroft, Manston Lane, Leeds, 14
R. Langrick, "Eastfield", Shadwell, nr. Leeds.
C. A. Walker, Manor Farm, Shadwell, Leeds, 17

### *Contraction of Infected Area*

The city was finally released from restrictions on November 14th, some six weeks after the occurrence of the initial outbreak. Thus ended one of the most severe outbreaks of Foot-and-Mouth Disease experienced in Leeds and the district for many years, an outbreak during which it was found necessary to slaughter 291 cattle and 437 sheep."

**Fowl Pest Order of 1936.**—Five suspected cases of fowl pest were reported in connection with farms and other premises in the city during the year, Form A (defining the premises to be Infected Places) being served in each case. Fowl pest was confirmed in two of these cases. 400 carcasses were disposed of by incineration at the Cleansing Department destructors in connection with these outbreaks, the carcasses being disposed of under the supervision of an inspector of this Department.

**The Poultry Pens, Fittings and Receptacles (Disinfection) Order, 1952 and the Poultry Premises and Vehicles (Disinfection) Order, 1956.**—During the year 56 visits were paid to poultry dealers in the city for the purpose of inspecting their premises, vehicles and equipment. Disinfection Notices were served on nine poultry slaughterers, requiring that their premises, crates, vehicles and other equipment be disinfected simultaneously in an attempt to eradicate any possible source of infection following three suspected cases of fowl pest, two of which were subsequently confirmed. Verbal warnings were issued on several other occasions on which conditions were found to be less than satisfactory.

**Warble Fly (Dressing of Cattle) Order of 1948.**—The following measures were adopted in connection with the enforcement of this Order; copies of the Order were delivered to cattle owners in the city, together with pre-paid postcards for return to the Department in the event of the discovery of infestation. Posters issued by the Ministry of Agriculture, Fisheries and Food were displayed at various points. 82 visits were paid to farms for the purpose of inspecting animals for the presence of the immature warble fly. 701 cattle were treated voluntarily by the farmers in the city, a figure which reflects a high degree of co-operation in the campaign for the eradication of the parasite. In four cases, notification of intention to dress was received by postcard, the farms being visited for the

purpose of supervision of dressing. In addition to the above, inspection of animals consigned to the city on importation licences was carried out in accordance with the details of destination shown on the licence.

Despite the extensive publicity campaign carried out and the satisfactory degree of co-operation on the part of the stock owners throughout the city there was an increase in the number of animals infested with the immature warble fly, 133 as compared with 51 in the previous year. This is, no doubt, occasioned by the unusually good breeding conditions provided by the warm summer of 1959.

The following table gives the relevant statistics :—

DETAILS OF WORK DONE			
	1958	1959	1960
No. of visits paid to farms .. .. .	149	147	82
No. of cattle inspected on farms .. .. .	1,511	1,052	591
No. of leaflets and cards distributed .. .. .	64	49	45
No. of cattle infested .. .. .	150	51	133
No. of infested cattle treated .. .. .	150	51	133
No. of non-infested cattle treated voluntarily .. .. .	507	503	701

**Sheep Scab Order, 1938.**—Under the Sheep Dipping Regulations all sheep are required to be dipped in an approved dip at some time during the period 1st September to 15th December.

All farms on which sheep are kept were visited during the year and dipping was carried out under the supervision of the lay inspector under the Diseases of Animals Act. At another farm it was considered expedient that dipping should be postponed by reason of a series of outbreaks of Foot-and-Mouth Disease in the city.

The undermentioned list gives sheep farms and the number of sheep dipped :—

G. Whitfield, Park Farm, Colton, Leeds, 15	25	sheep	dipped
G. H. Dalby, Bank House Farm, Eccup, Leeds	40	„	„
O. Lister, Black Hill Farm, Eccup, Leeds ..	494	„	„
H. C. Peate, Owlet Hall Farm, Eccup, Leeds	93	„	„
D. W. Osborne, White Laithe Farm, Leeds, 17	129	„	„



**Animals (Landing from Channel Islands, Isle of Man, Northern Ireland and Republic of Ireland) Order, 1955.**—During the year 12,808 Irish sheep were received under licence for immediate slaughter at the Public Abattoir, Leeds, and the Leeds Industrial Co-operative Society, Ltd., Slaughterhouse, Gelderd Road, Leeds. In comparison with the previous year the figure showed an increase of 9,240. 53 Irish pigs were imported during the year, there being none the previous year.

**Diseases of Animals Act, 1950 (Second Schedule).**—During the year 10,816 Irish cattle were received under licence for immediate slaughter at the slaughterhouses mentioned in the preceding paragraph. In addition, 147 licensed Irish store cattle were received at a farm in the city, these being inspected on arrival. Further visits were subsequently paid to ascertain that the licensing conditions were being satisfactorily complied with. The figure for imported cattle represents an increase of 6,276 over the previous year's total.

**The Diseases of Animals (Waste Foods) Order, 1957.**—During the year three further applications were received in respect of new plant and equipment for the boiling of waste foods under this Order. At the close of the year there were 102 plants on the register of the Department. 8 visits were paid to boiling plant premises during the year under review.

**Legal Proceedings.**—A livestock carrier was prosecuted for moving animals through a Foot-and-Mouth Disease Infected Area without a licence during the operation of restrictions arising from outbreaks of the disease in the Harewood area. The defendant was conditionally discharged on payment of 4s. costs.

Two poultry keepers in partnership were prosecuted for the movement of poultry from premises on to which there had been a movement of poultry during the preceding "quarantine" period. One partner was given a conditional discharge on payment of 4s. costs; the other was fined £10 with 22s. costs.





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## General Sanitation

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## INSPECTION OF FACTORIES

BY

J GOODFELLOW, F.R.S. H., M.I.P.H.E.,  
*Chief Public Health Inspector*

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Mr. J. Norton, Supervisory Inspector of the Factories Section, has furnished details for this part of the Report.

The Factories Section of the Department has continued, during 1960, to deal with the inspection of factories, shops and offices in the city, and has also been largely concerned with the administration of the provisions of the Clean Air Act, 1956, particularly with regard to the establishment of Smoke Control Areas. Details of the work done under the various provisions of the Clean Air Act is set out in the section of the Report which deals with the prevention of atmospheric pollution.

**Factories.**—The inspection of factories has been carried out by inspectors of the Factories Section and details of the work done during 1960 are given in the four tables printed on pages 204 and 205.

The Medical Officer of Health for every Council of a Borough or County District is required under Section 128(3)(a) of the Factories Act, 1937, to report in his Annual Report to the Council specific details on the administration of, and to furnish the prescribed particulars with reference to, matters under Parts I and VIII of that Act which have been delegated to the District Councils for administration; a copy of this Annual Report is to be forwarded to the Minister of Labour.

Means of escape in case of fire is dealt with by inspectors working under the direction of the City Engineer and no details of the work done in this connection are available.

Of the four tables mentioned above, the first two show details of the inspection of factories for the purpose of provisions as to health and the number of cases in which defects were found. The tables represent the work of the male inspectors of the staff, whilst the other two tables deal with outwork and other matters dealt with by the female inspector.

The Register of Factories which the City Council is required to keep now contains the addresses of 179 non-mechanical factories and 2,906 mechanical factories. Whilst showing little change in the number of non-mechanical factories, there is a decrease in the number of mechanical factories on those shown in the Register in 1959. In addition to the factories contained in this register there were during the year, some 78 other premises in which Section 7 of the Factories Act, 1937 (which deals with the provision of sanitary accommodation) is enforced by the City Council. These premises consist principally of works of building and engineering construction.

During the year 1,321 inspections of mechanical and non-mechanical factories were made under the provisions of the Factories Act. Contraventions of the Act and other defects were found in 154 instances during the year and, of these, 140 were remedied by the end of the year. 121 written notices were served in connection with these contraventions together with a considerable number of verbal intimations.

There has been no necessity during 1960 to institute legal proceedings to enforce compliance with the Act, although a certain number of defects still remain outstanding at the end of the year. Those few which remain outstanding will be followed up in the usual way to make certain that they are remedied.

There were on the Register some 78 sites on which works of building or engineering construction were proceeding. On these sites it is the Council's responsibility to enforce the provisions of the Factories Act which deal with sanitary conveniences. Some 30 visits were paid during the year to sites which have been added to the Register and, in 3 instances, notices were served requiring the provision of, or improvement to, existing sanitary accommodation. A few complaints were received about sanitary conveniences on these sites, usually referring to unsuitable siting of the conveniences near to occupied property. In most cases, where the drainage of a new building was laid, water closets were provided for the work-people. In other cases suitable chemical closets, properly screened and provided with deodorising fluids, were accepted by this Department as reasonable.

The table which lists the cases in which defects were found and which is printed on page 204 contains details of 33 reports which were received from H.M. Inspectors. These all referred to insufficiency or unsuitability of sanitary conveniences. However, during the year 7 non-mechanical factories were found to be in a dirty condition and six of these had been properly cleansed by the end of the year; the seventh was in the process of being cleansed at the end of the year. Four non-mechanical factories were also found to have inadequate ventilation, but these four were found towards the end of the year and had not been remedied when this report was written.

The table printed on page 205 and which is headed "Other Matters" quotes the number of bakehouses on the Register of Factories as 163. 161 of these are mechanical bakehouses and 2 are non-mechanical. The number does not include all bakehouses in the city as there are several small family operated bakehouses which H.M. Inspectors do not regard as registerable under the Factories Act. The number of these family bakehouses is falling owing to the very intense competition from the large bakery firms which operate on a wholesale basis.

There are no basement bakehouses in the city for which certificates of suitability under the Factories Act have been issued.

The visits which are recorded in the tables printed on page 204 refer only to visits made under those provisions of the Factories Act which have been delegated to the City Council. Many more visits were, of course, paid by public health inspectors to factories to deal with matters outside the provisions of the Factories Act. For example, many complaints were received about nuisances which could be dealt with under the provisions of the Public Health Acts. Visits were made for the purpose of inspection of boiler plant under the provisions of the Clean Air Act and, in the case of food factories, regular inspections were carried out to see that the provisions of the Food and Drugs Act and the Food Hygiene (General) Regulations, 1960, were complied with. Details of the visits paid in connection with these matters are absorbed in the table of work done by public

health inspectors which is set out on page 222. As an example of these visits, inspectors in the Factories Division made 115 special visits to canteens in factories and to the larger food preparation factories in the city ; they dealt with some 59 contraventions of the Food Hygiene Regulations which were found therein.

Reference was made in my last Report to a particular complaint of nuisance from smells of gas liquor affecting various factories in the vicinity of one of the gas works in the city. This matter has been under investigation for more than a year. An all-out effort to trace the source of the trouble revealed in the end that the smells were due to various leakages, escapes and overflows of gas liquors which were obtaining access to the sewers. The effluents were of various sorts but in particular from the Benzol recovery plant and from the naphthalene washer. All these effluents have now been diverted into the main gas liquor collection tank for the gas works. Since that was done the complaints have stopped. The Gas Board have also installed a petrol type interceptor in the main drainage outlet from the gas works before it connects to the public sewers, so that if there are any inadvertent discharges into the gas works drainage system the liquor should be arrested before it reaches the sewers.

Many complaints which were received concern factories which are registered under the provisions of the Alkali, Etc. Works Regulations, 1906. Complaints which concern discharges from processes carried on in these factories are referred to H.M. Inspector for any action which can be taken. A close liaison exists between the Health Department and the District Alkali Inspectors. It is, of course, possible that discharges which satisfy the Alkali Inspector could still create nuisance to surrounding properties and, in such cases, the Department have had on occasion to ask for works to be done in excess of those required by the Alkali Inspector. A particular complaint which concerned a registerable works was about fume emissions from a lead works, the fumes being caused by the smelting of old car batteries in order to recover the lead from the plates. A solution of this problem is proving most intractable and negotiations about this nuisance were still continuing at the end of the year.



**Noise.**—Complaints about noise and vibration continue to be received. The Leeds Corporation Act, 1956, Section 134, deals with nuisances of this type and has now been supplemented by the provisions of the Noise Abatement Act, 1960. The wide publicity which accompanied the passing of the Noise Abatement Act is likely to result in an increase in the number of complaints. It has not been found necessary to institute legal proceedings in these cases as yet and the only proceedings in the Leeds area which have so far been recorded have been taken privately by an aggrieved householder.

A solution to noise problems is most difficult because the offending noise may affect different individuals to a different degree and such noise must be judged against the background level of noise which is normally present in the area. Many complaints were received in regard to noises caused by factories working during the evening and throughout the night. An increasing number of complaints referred to daytime noise, the complainants being night-workers who found difficulty in sleeping during the day.

The number of noise nuisances reported in 1960 was 16 and of these 2 were regarded as not justifiable.

Whether a particular noise level constitutes a nuisance or not is a matter of opinion and the use of a noise level indicator is considered very helpful. An investigation into the problem of noise nuisance is being carried out by the Department of Scientific and Industrial Research and Leeds is co-operating in this investigation by taking readings of sound levels from different sources.

Nuisances with which public health inspectors are frequently required to deal are those produced by defects in the structure of factory buildings which might affect the health and comfort of workpeople and be regarded as prejudicial to health. Instances of such defects are leaking roofs, defective and leaking eaves-spouting causing dampness and other similar matters.

A great number of the factories visited by public health inspectors in the Factories Division are concerned with the production of foodstuffs. In addition, many factories are provided with canteens and mess-rooms for use by employees. Factory inspectors have spent much time visiting these food factories and canteens to ensure that

the provisions of the Food Hygiene (General) Regulations, 1960, were complied with. Details of the work done under this heading are included in the section of the Report dealing with Food Hygiene. In many cases the Department was able to comment upon the detailed lay-out of canteens when these were shown on plans received for comment from the City Engineer's Department.

For many years an arrangement has existed between the City Engineer's Department and this Department for the exchange of information about the establishment of factories in the city. Copies of the lists of changes of occupation of factories which were received from H.M. Inspectors were forwarded to the City Engineer. The Town Planning Division of the City Engineer's Department has asked for opinions upon the siting of particular processes throughout the city. This arrangement gave opportunity for passing comments upon the probability of nuisance before the factories were actually constructed or established.

**Outworkers.**—The number of outworkers in the August list was 923. 887 of these were concerned with the making of wearing apparel and 36 with textile weaving. The number of addresses of outworkers received from other authorities was 145 and the number sent from Leeds to other authorities was 287. There were 3 cases of notifiable diseases at outworkers' premises during the year.

**Workplaces.**—During 1960, 337 visits were paid to workplaces, including offices. The conditions in all cases were found to be satisfactory.

During the year the Offices Act, 1960, was passed but this is not to come into operation until 1st January, 1962, and the Government has indicated that it is likely that they will, before that date, bring in a further Act to deal with all types of non-industrial employment.

**Shops.**—All the provisions of Section 38 of the Shops Act, 1950, have been delegated to the Health Committee and during the year public health inspectors paid 366 visits to shop premises. Conditions generally were found to be satisfactory and six defects only were recorded. These were remedied as follows :— shops ventilated 1, washing facilities provided 1, other defects remedied 4.

During 1960 an application was received for a Certificate of Exemption under the provisions of Section 38 (6) against a requirement by this Department that a sanitary convenience be provided in a kiosk selling sweets, tobacco and periodicals. This was refused by the Health Committee and a subsequent appeal against the refusal was also unsuccessful.

**INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH  
(INCLUDING INSPECTIONS MADE BY PUBLIC HEALTH INSPECTORS)**

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities .. .. .	179	13	5	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority .. .. .	2,906	1,308	116	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) .. .. .	78	30	..	..
<b>Total .. .. .</b>	<b>3,163</b>	<b>1,351</b>	<b>121</b>	<b>..</b>

**CASES IN WHICH DEFECTS WERE FOUND**

Particulars	No. of Cases in which defects were found				No. of cases in which prosecutions were instituted
			Referred		
			To H.M. Inspector	By H.M. Inspector	
Found	Remedied				
Want of cleanliness (S. 1) ..	7	6	..	..	..
Overcrowding (S. 2) .. ..	..	..	..	..	..
Unreasonable temperature (S. 3) ..	..	..	..	..	..
Inadequate ventilation (S. 4) ..	4	..	..	..	..
Ineffective drainage of floors (S. 6) .. .. .	..	..	..	..	..
Sanitary Conveniences (S. 7)—					
(a) Insufficient .. ..	18	7	..	2	..
(b) Unsuitable or defective ..	120	127	..	24	..
(c) Not separate for sexes ..	2	..	..	7	..
Other offences against the Act (not including offences relating to Outwork) .. ..	3	..	3	..	..
Total .. .. .	154	140	3	33	..



## SANITATION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,  
*Chief Public Health Inspector*

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**Water.**—During the year 415 samples of drinking water were taken by the Department for bacteriological examination. 386 of the samples were taken from the Corporation's mains supply, 9 were samples of well water and 20 samples were taken from springs. 27 samples of town's water were unsatisfactory but subsequent samples taken from the same domestic taps proved satisfactory. Five samples of well water and 10 samples of spring water were unsatisfactory.

**Sewage Disposal**—(Report of Mr. D. Currie, City Engineer).—During 1960, 7 to 8 per cent. of the bacteria beds were out of action while repairs were in progress. The corresponding figure for 1959 was 8·25 per cent. The average analyses of final effluent at Knostrop Sewage Works from January 1st to December 31st, 1960 were:—

Oxygen absorbed in 4 hours	..	2·3 parts per 100,000
Suspended solids	.. .. .	7·2 parts per 100,000

**Public Cleansing**—(Report of Mr. G. F. Mellor, Director of Public Cleansing).—Particulars of refuse collection and disposal during 1960 are as follows:—

	<i>Tons</i>
Household refuse and nightsoil collected	.. 169,632
(a) dealt with at destructors.. ..	.. 69,614
(b) disposed of at tips and for agricultural purposes .. .. .	.. 85,573
(c) number of tons of cesspool contents discharged into Corporation sewers	.. 14,445

The quantity of screened refuse dust sold as manure to farmers was 12,664 tons.

**Dustbins and Ashpits.**—The number of dustbins provided by the Cleansing Department and delivered to dwelling-houses in Leeds during the year was 9,374. The total number provided since the inception of the scheme in December, 1946, is 169,943.



During the year the Health Department secured the abolition of 6 ashpits and the Corporation approved grants-in-aid amounting to £39 4s. 6d. in connection with the abolition of these ashpits.

**Water Supply (Report of Mr. K. L. Forster, General Manager and Engineer of the Waterworks Department).**—Bacteriologically the water was satisfactory throughout the year. During the early part of the year, however, the condition of the raw water was abnormal following the drought of 1959. The presence of very fine silt seriously interfered with filtration and, as a result, there were occasions when the clarity of the water in certain districts was affected to a slight extent.

It was necessary to take measures to reduce consumption and the use of hosepipes was prohibited from 1st to 22nd July, 1960.

Bacteriological examinations of raw water arriving at Headingley Filtration Works were made during the year, and the water going into supply after filtration and chlorination was also classified. The following table shows the results of these examinations.

#### SUMMARY OF BACTERIOLOGICAL EXAMINATIONS

Raw Water Arriving at Headingley Filtration Works	No. of samples	Average Count		
Probable No. of Coliform bacilli in 100 ml. water ..	308	473		
Probable No. of B.Coli Type 1 in 100 ml. water ..	308	240		
Anaerobes in 40 ml. water (Wilson and Blair's Test) ..	51	3		
Agar Plate Count, 48 hours at 37°C. Colonies per ml. ..	45	41		
WATER GOING INTO SUPPLY AFTER FILTRATION AND CHLORINATION				
(a) Water entering the Distribution System				
No. of samples	Ministry of Health Classification (1956)			
	Class 1	Class 2	Class 3	Class 4
670	99.1%	Nil	Nil	0.9%
(b) Samples taken from Service Reservoirs and Consumers' Premises (excluding samples taken by Public Health Dept.)				
No. of Samples ..	Satisfactory		Unsatisfactory	
1,080	99.00%		1.00%	



During the year 186 samples of town's water from the public supply were subject to chemical analysis and the table which follows summarises the results of these analyses.

**SUMMARY OF CHEMICAL ANALYSES OF THE PUBLIC WATER SUPPLY FOR THE YEAR ENDED DECEMBER 31st, 1960. SUMMARY BASED ON 186 ANALYSES OF SAMPLES OF WATER FROM THE PUBLIC SUPPLY.**

	Parts per million except where otherwise stated		
	Average	Maximum	Minimum
*Turbidity (Silica scale) .. .. .	Less than 2	7	Less than 2
*Colour (Hazen Units) .. .. .	12	38	5
*pH. .. .. .	7.22	8.8	6.7
Free Carbon Dioxide .. .. .	1.6	4.0	Nil
Alkalinity (Carbonate or temporary hardness) (in terms of $\text{CaCO}_3$ ) .. .. .	17	22	11
Total Hardness (in terms of $\text{CaCO}_3$ ) .. .. .	58	72	48
Non-Carbonate (Permanent) Hardness (in terms of $\text{CaCO}_3$ ) .. .. .	41	58	31
Oxygen absorbed from Permanganate in 4 hours at 27°C. .. .. .	1.25	3.1	0.3
Ammoniacal Nitrogen (in terms of N) .. .. .	0.008	0.112	0.001
Albuminoid Nitrogen („ „ „ „) .. .. .	0.035	0.186	0.012
Nitrite Nitrogen („ „ „ „) .. .. .	Nil	Minute trace	Nil
Nitrate Nitrogen („ „ „ „) .. .. .	0.55	0.80	0.40
Chlorine present as Chloride (in terms of Cl) .. .. .	15	18	13
Silica (in terms of $\text{SiO}_2$ ) .. .. .	7.5	9	6
Iron compounds (in terms of Fe) .. .. .	0.02	0.4	Nil
Manganese „ ( „ „ „ Mn) .. .. .	Nil	Trace	Nil
Lead „ ( „ „ „ Pb) .. .. .	Less than 0.01	0.12	Nil
Total solids dried at 180°C. .. .. .	100	117	87
*Electrical Conductivity—Micro-ohms/ $\text{CM}_3$ at 20°C. .. .. .	149	182	128
*Residual Chlorine (on reaching consumer) .. .. .	Nil/Trace		

\* Summary based on daily determinations on samples taken from Distribution Mains supplying all parts of the City and weekly determinations on samples from Service Reservoirs

*Plumbo-Solvency.*—Water leaving the storage reservoir at Eccup is treated with lime, normally at the rate of approximately 5 p.p.m. with the object of producing a water which, after filtration and chlorination, is not plumbo-solvent. During the early part of 1960 the dosage was increased to approximately 7 p.p.m. and, in addition, lime was added at the inlet to Eccup Reservoir to raise the pH of the incoming water which, following the drought of 1959, was abnormally low.

Regular determinations of pH and alkalinity are made on samples of water taken from various points in the distribution system and the determination of lead is included in the chemical analyses of samples which have been drawn through lead pipe. The maximum amount of lead found during 1960 was 0.12 p.p.m.

*Action in respect of any form of contamination.*—There were no instances of serious pollution during the year.

In August a number of samples was obtained from the Harehills district which gave high Cloriform counts (mainly of non-faecal types). The source of the trouble was found to be a short length of newly laid main. It was possible to take this main out of service and satisfactory samples were obtained after repeated flushing.

In September a small amount of pollution occurred at Gypsy Lane Reservoir. This was successfully dealt with by treating the reservoir with sodium hypochlorite solution.

*Particulars of the number of dwelling-houses and the number of the population supplied from the public water mains.*—(a) (i) Number of dwelling-houses and dwelling-houses attached to shops within the City of Leeds boundary—183,946 (estimated), (b) Population supplied from the public water mains: (i) direct to houses within the City of Leeds boundary—514,760 (estimated), (ii) by means of stand-pipes—none.

The estimated number of cistern water-closets in use within the city boundary at 31st March, 1961, was 215,556.

**Keeping of Animals.**—The number of pig-keepers in the city decreased to 162 and the number of pigs kept was of the order of 4,000.

One Statutory Notice was served during the year under the City of Leeds Byelaws with regard to the keeping of swine. In this instance the occupier of premises was required to cease keeping swine within 60 ft. of a dwelling house.

**Closet Accommodation.**—Three privy middens serving isolated farms in the city were abolished during the year. Due to the fact that a Corporation sewer was not available these privy middens

could only be abolished by providing pail closets and dustbins in lieu. The Health Committee agreed to bear the cost of the structural work necessary in these cases, and the Cleansing Committee agreed to provide pail closets and dustbins without charge to the owners of the premises concerned.

A total of 144 statutory notices was served under the provisions of Section 45, Public Health Act, 1936, in connection with closet accommodation. In the owners default the water-closets appurtenant to 9 houses were repaired at a cost of £21 15s. 4d.

**Offensive Trades.**—The number of premises in the city where offensive trades are carried on is 110. During the year 87 visits of inspection were made.

**Common Lodging Houses.**—During the year 242 routine visits of inspection were made to common lodging houses. The number of common lodging houses in the city remains unchanged at 6.

**Houses-let-in-Lodgings.**—The total number of visits paid to houses of this type was 628.

**Cellar Dwellings and Underground Sleeping Rooms.**—During the year 97 visits were made to underground sleeping rooms.

**Caravan Sites**—*Cardigan Lane Camping Site.*—An application for the renewal of the licence under Section 147 of the Leeds Corporation Act, 1956, in respect of the site at 51, Cardigan Lane for 8 movable dwellings, was granted subject to the following conditions :

1. That this licence shall continue in force for a period up to 31st March, 1961.
2. That not more than 8 movable dwellings be allowed on the site at one time.
3. That the class of movable dwellings which may be kept thereon shall be of the modern trailer type of proprietary design in good condition and readily mobile.
4. That the caravans shall be situated at least 15 feet apart.
5. That a proper supply of town's water, accessible at all times and properly protected against damage from frost, shall be maintained.

6. (a) that satisfactory water closet accommodation shall be maintained for the caravan dwellers, such accommodation to be separate for the sexes, adequately screened and indicated.
- (b) that a drain inlet shall be provided for the disposal of waste water by the caravan dwellers, and such inlet to be in an appropriate position and indicated.
- (c) that galvanised metal dustbins shall be provided in the ratio of one dustbin to two caravans, such dustbins to be maintained in good condition and provided with tight fitting lids and placed on an approved impervious hard standing.
- (d) that a suitable receptacle shall be provided for the storage of solid fuel in connection with every caravan using such type of fuel.
- (e) that there shall be provided on the surface of each caravan site a suitable approved hard standing, the length and breadth of which shall exceed those of the caravan by 3 ft.
- (f) that the land shall be provided with suitable approach road to the hard standings and suitable paths from the hard standings to the accommodation provided by way of dustbins, water closets and water supply.

7. That the trees on the site be preserved.

*Wentworth Farm, New Farnley.*—An application was received from Mrs. Emma Stephenson to use land in the orchard at Wentworth Farm, New Farnley, for 7 movable dwellings under Section 147 of the Leeds Corporation Act, 1956. A licence was granted for a period up to 1st July, 1960. A further application for the renewal of the licence was made by Mrs. Emma Stephenson for 8 movable dwellings under Section 147, Leeds Corporation Act, 1956. The application was refused. On the introduction of the Caravan Sites and Control of Development Act, 1960, which came into force on August 29th, 1960, the application was reconsidered and a licence granted subject to the following conditions:—

1. That not more than eight caravans be allowed on the site at any one time,

2. That the caravans be of the modern trailer type of proprietary make, in good condition, and readily mobile.
3. That every caravan be not less than 20 ft. from any other caravan in separate occupation.
4. That suitable footpaths not less than 2 ft. 6 ins. wide with a hard surface be provided, leading to each caravan standing, and to the toilet block.
5. That every caravan stand on a hard standing of suitable material, which must extend over the whole area occupied by the caravan placed upon it and project not less than 3 ft. outwards from the entrance or entrances of the caravan.
6. That water stand pipes with an adequate supply of town's water be situated not more than 60 ft. from any standing, and that such water supply be maintained and be properly protected against damage by frost.
7. That each caravan standing have proper provision for the disposal of waste water by means of a trapped drain inlet connected to a public sewer.
8. That the two existing water closets provided for men and for women be properly maintained and suitably indicated.
9. That a suitable shower or bath with a constant supply of hot and cold water be provided.
10. That laundry facilities in a separate room consisting of at least one deep sink with constant hot and cold water be provided.
11. That proper surface water drainage for the footways and paved areas and for the site generally be provided.
12. That each caravan standing have a galvanised metal dustbin.
13. That suitable receptacles be provided for the storage of solid fuel in connection with every caravan using such fuel.
14. That a suitable firepoint equipped with a water tank provided with a hinged cover, two buckets and one handpump or other approved fire-fighting appliances, be provided in a readily accessible position,



15. That suitably surfaced parking places for cars be provided.
16. That the trees on the site be preserved.
17. That at all times when caravans are stationed on the land for the purposes of human habitation, a copy of the licence as for the time being in force shall be displayed on the land in some conspicuous place.

*Five Lane Ends Camping Site, Eccup.*—Following the Ministry of Housing and Local Government confirmation of an Order made under Section 151 of the Leeds Corporation Act, 1956, prohibiting the use of land for camping purposes with effect as from April 1st, 1960, the site at Five Lane Ends, Eccup, was cleared of all movable dwellings.

**Canal Boats.**—The number of canal boats on the register at the end of the year was 119. Periodical visits of inspection were made to wharves and locks and the number of boats inspected during the year was 317. Six boats required repairs to leaking stern and deck structure, and the necessary works were carried out by the owners after receiving verbal notice.

**Public Sewers.**—During the year 915 public sewers affecting 3,110 houses or other premises were cleansed at a cost to the Department of £1,337 8s. 6d. Works of repair or maintenance were carried out to 113 defective public sewers, and the cost of this work amounting to £2,005 13s. 0d. was recovered from the owners of the premises served by the sewers.

**Drains.**—It was necessary to carry out 4,122 drain tests, 181 of these being in respect of new drains relaid in place of those found defective. A large number of informal notices was served on the owners of property for drainage repairs and in 350 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936. The drains of 17 houses were repaired or renewed by the Department in default as a matter of urgency at a cost of £106 1s. 4d. which was recovered from the owners of the premises concerned.

144 statutory notices were served under the provisions of Section 111, Leeds Corporation Act, 1956, requiring the removal of stoppages from drains within 48 hours. 55 such drains were cleansed by the Department in default at a cost of £70 15s. 2d. which was



recovered from the owners concerned. The drains of 1,836 houses or other premises belonging to Corporation Departments were cleansed, repaired or renewed at a cost of £2,053 17s. od. which was recovered from the Departments concerned.

The cleansing and repair of drains serving 404 houses was undertaken by the Department under the provisions of Section 112, Leeds Corporation Act, 1956, at the owners request, and the cost of this work amounting to £553 1s. 9d. was charged to the owners concerned.

**Removal of Persons in need of Care and Attention (Section 47, National Assistance Act, 1948).**—During the year 11 certificates were issued by the Medical Officer of Health under Section 47 of the National Assistance Act, 1948. The persons concerned who had been living in insanitary surroundings and were unable to devote to themselves proper care and attention, were admitted to hospital.

**Articles exchanged for Rags.**—During the year 2 persons were warned for offences against Section 154 of the Public Health Act, 1936, which places restrictions on the exchanging of toys for rags.

**Examination of Plans.**—The arrangements whereby certain plans of new work submitted to the Building Surveyor's office are forwarded to this Department for comment continued during the year. 1,602 such plans were forwarded to the Department for the Medical Officer of Health's comments.

**District Inspection and Investigation of Complaints.**—The total number of houses surveyed and examined was 20,651. The number of complaints investigated during the year was 6,742 and 7,071 nuisances and housing defects were remedied. The tables on pages 220 to 223 give details of the work done by public health inspectors.

**Notices.**—The number of informal notices served in relation to Public Health Act matters was 2,286 and statutory notices served in this connection numbered 1,184.

**Hairdressers and Barbers.**—During the year under powers contained in Section 244 of the Leeds Corporation Act, 1956, 24 persons carrying on the trade of hairdresser or barber and their premises in the city were registered. The total number on the register on 31st December, 1960, was 462.

**Public Swimming Baths.**—Particulars of municipal swimming baths in the city have been supplied by Mr. R. A. Ashton, Director of the Baths and Wash-houses Department, as follows :—

“ There are 9 indoor public swimming bath establishments with a total of 14 swimming pools. The water used for filling is drawn from the town mains. All these pools are fitted with a continual circulating filtration plant, the average turnover being 4 hours. A modern type of chlorinator has been fitted to each filtration plant and the water is subjected to continuous chlorination.

There is also a public open-air pool situated in Roundhay Park and the water for this pool is drawn from the Waterloo Lake. Water for showers, toilets and domestic use is, however, supplied from the town mains. This swimming pool has a filtration plant with a 6 hour turnover. A modern type of chlorinator has been fitted and the water is subjected to continuous chlorination.”

There is also one privately owned public swimming bath in the city and town's water is used for filling the bath which is provided with a circulating filtration plant and continuous chlorination.

During the year 29 samples of swimming bath water were taken by public health inspectors and submitted to the Public Health Laboratory Service for examination. Three samples taken from one swimming bath and two samples taken from another were unsatisfactory, and copies of the bacteriological examination reports were forwarded to the Director of Baths and Wash-houses for necessary action.

**Pet Animals Act, 1951.**—Under the provisions of Section 1 of the Pet Animals Act, 1951, 3 licences were granted during the year to persons keeping a pet shop, and 31 licences were renewed. Visits of inspection were made to all licensed pet shops to ensure that the conditions of the licence were being complied with.

Legal proceedings were taken under the provisions of Section 2 against a person for offering a dog for sale in a public place. The defendant was found guilty and fined £20.

**Legal Proceedings.**—*Public Health Act, 1936.* During the year two owners of dwelling houses were summoned for non-compliance with abatement notices in respect of nuisances arising from various

defects of repair. In both cases the necessary works were carried out prior to the Court hearing and in consequence the cases were withdrawn.

**Rodent Control.**—Mr. W. Pickles, Public Health Inspector in charge of Rodent Control, has reported details of the work of the rodent operatives for inclusion in this section of the Report.

*Complaints.*—During the year 2,297 complaints were received by the Rodent Control Section. Of this number, 1,141 referred to rats, 1,068 to mice, 51 to pigeons, 25 to damage by rabbits and 12 miscellaneous which included moles and sparrows.

The following table shows the number of complaints of rats and mice received during the year and analysed according to months and types of premises affected.

1960	Rats					Mice				
	B	PD	LA	A	Total	B	PD	LA	A	Total
January	15	49	2	1	67	34	58	12	..	104
February	15	61	2	..	78	24	64	6	..	94
March ..	17	69	1	..	87	25	63	12	..	100
April ..	22	66	4	..	92	13	44	6	..	63
May ..	18	87	7	..	112	26	47	15	..	88
June ..	12	73	1	..	86	24	41	6	..	71
July ..	26	81	3	..	110	25	55	6	..	86
August ..	30	85	3	..	118	25	44	3	..	72
Sept. ..	22	59	4	1	86	21	62	8	..	91
Oct. ..	27	98	7	..	132	20	66	5	..	91
Nov. ..	27	73	5	1	106	39	70	12	..	121
Dec. ..	23	40	4	..	67	29	47	11	..	87
Total	254	841	43	3	1,141	305	661	102	..	1,068

B—Business Premises  
PD—Private Dwellings

LA—Local Authority's premises only  
A—Agricultural or Horticultural Premises

Included in the table under the headings of business premises and private dwellings are complaints of 15 Local Authority owned business premises, 150 Local Authority owned houses where there was some measure of rat infestation, 19 Local Authority business premises and 234 Local Authority houses where mouse infestation was reported.



Destruction of rats on a Corporation refuse tip by Sulphur Dioxide using "Lepit" Gas Cartridge, with dogs "set" to catch any which may bolt.





### TOWN HALL, LEEDS

Main entrance stonework fouled by pigeon droppings.

*Inspections.*—The total number of inspections made in relation to rodent control for the year was 21,498. The number of inspections and visits made in connection with complaints received and for the servicing of infested premises was 12,096. The figure for inspection of Leeds Corporation sewer manholes was 9,402.

*Sewer Baiting.*—This work continued throughout the year in accordance with the Ministry's recommendations and, after test baiting, maintenance treatments were proceeded with in the case of manholes where takes were recorded and in the requisite number of manholes on either side.

Two new direct poisons, Sodium Fluoroacetate and Fluoroacetamide, have been introduced for the treatment of sewers. Although these poisons are dangerous to handle, it is proposed, using appropriate precautions, to try out Fluoroacetamide in the Central Area during the next maintenance treatment in order to ascertain its suitability for this class of work. During the year 3,101 manholes were baited.

*Treatments.*—During the year 1,371 premises were serviced for some degree of rat or mouse infestation (309 business premises, 983 private dwellings, 65 Local Authority owned properties and 14 agricultural properties). 1,207 new infestations were recorded—621 were found to have mouse infestation and 586 to have some degree of rat infestation. Of the new infestations, 1,174 premises were treated by the Rodent Control Section of the Department. At some properties where there was only slight mouse infestation, advice and instructions were given to occupiers who carried out their own treatment. At a number of business premises, after the initial treatment, semi-permanent baits were laid and inspected monthly, principally as an insurance against re-infestation.

*Prevention of Damage by Pests Act, 1949.*—Under the Prevention of Damage by Pests Act, 1949, the number of informal notices served for treatment and structural proofing was 21. During the year 52 premises were proofed against rodents and in this regard I would again like to comment on the good co-operation that has been given by owners and occupiers of premises and other Corporation Departments; their help has been much appreciated.



Small proofing works have been carried out by the Rodent Control staff at the time of servicing, as it has been found that delayed proofing caused by having to await the convenience of a contractor, has resulted in some measure of re-infestation.

*Warfarin.*—This poison is still being used in appreciable quantities for surface treatments against rats and mice but, over the last twelve months, the incidence of high resistance or immunity to this drug by mice has risen sharply and at a number of properties the use of alternative poisons and traps has had to be resorted to.

Since the 1959 Report, seven mice which appeared to have an immunity to Warfarin were despatched to the Ministry's laboratories at Tolworth. Very little information has been received in return except to the effect that the mice appeared resistant to some extent to anti-coagulants; two have survived their tests. It is appreciated that to carry out experiments in this field can be a long and arduous task, but we await with interest any further information which may determine policy with regard to the reduction of the mouse population. No estimated kill by Warfarin has been made but during the year 2,319 dead rodents (including 112 rabbits) were collected and destroyed.

*Pigeons.*—During the year 51 complaints were received from occupiers of private dwellings and business premises of nuisance from feral pigeons. Each complaint was investigated and action was taken in the majority of cases. The total number of inspections and visits made was 1,337; by shooting, trapping and netting, the city's population of feral pigeons was reduced by 1,601 birds. Three premises were cleared and three premises proofed against the birds.

In an endeavour to minimise damage to structures, watch is kept on the Town Hall, Civic Hall and the Municipal Buildings and, during the year, 24 birds have been destroyed on these premises. Pigeons create a serious nuisance by the fouling of buildings and pavements and the stopping of gutters by nesting material and droppings causing damage to decorations and deterioration of stonework and brickwork where the birds habitually roost. The photograph opposite page 217 shows to what extent spoilage of a building can occur.

The reduction of a city's bird population is a slow process. Although the breeding rate is not excessive, the hen bird will lay two eggs and may have three or four nests each year. The young born in the early part of the year may themselves be sitting eggs later in the year and, where conditions are suitable, they will breed all the year round.

Although shooting, trapping and netting are the methods used for the elimination of birds, shooting has been found to be the best method, especially in relation to cost as compared with trapping because traps must be visited at least once every 24 hours. For shooting purposes, a .22 B.S.A. air rifle is used, firing a lead slug. Shooting is more effective during the hours of darkness when the birds have come in to roost; without daylight they are more reluctant to fly and by means of a spotlight one may shoot a bird without much disturbance of its nearby neighbour. In this connection, two members of the Rodent Control staff are on duty every Thursday night from 7 p.m. to 4 a.m. and combine pigeon shooting operations with the servicing of premises for rodents where it is not advisable or convenient to visit during working hours. Since the commencement of action to reduce the number of feral pigeons in Leeds at the end of 1956, 10,035 pigeons have been destroyed.

*General.*—One cannot stress too often to occupiers and owners of premises the necessity for practising hygiene, the proper disposal of waste food, the removal of lumber and refuse in which rodents may live and breed and the necessity for reporting immediately any infestation which may arise so that the necessary action can be taken to keep the city's rodent population to a minimum.

ANALYSIS OF INSPECTIONS										(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
	North Div.	South Div.	East Div.	West Div.	Fact- ories Div.	Hous- ing Div.						
DWELLINGS.												
1. Houses fit in all respects .. .. .	36	50	7	9	..	..	..	..	..	..	102	
2. Houses unfit and capable of repair .. .. .	73	28	5	7	..	69	..	..	..	..	182	
3. Houses unfit and incapable of repair .. .. .	57	52	239	26	..	1,167	..	..	..	..	1,541	
4. Underground dwellings and parts of buildings .. .. .	4	..	..	16	..	77	..	..	..	..	97	
5. Houses for drainage .. .. .	3,317	1,743	3,994	2,782	..	..	..	..	..	..	11,836	
6. Houses for ashes accommodation .. .. .	280	175	300	111	..	..	..	..	..	..	866	
7. Houses for closet accommodation .. .. .	540	150	656	140	..	..	..	..	..	..	1,486	
8. Houses for complaints and defects .. .. .	1,927	1,227	1,387	1,646	1	..	..	..	..	..	6,188	
9. Houses for infectious diseases .. .. .	1	..	13	1	..	..	..	..	..	..	15	
10. Houses for overcrowding .. .. .	10	26	23	18	..	..	..	..	..	..	77	
11. Houses for filthy conditions .. .. .	49	19	30	36	..	..	..	..	..	..	134	
12. Houses for verminous conditions .. .. .	70	7	19	35	..	41	..	..	..	..	172	
13. Housing re-inspections .. .. .	5,607	5,858	1,557	2,293	..	295	..	..	..	..	15,610	
14. Houses let in lodgings .. .. .	435	2	18	31	..	142	..	..	..	..	628	
15. Separate dwellings within houses let in lodgings .. .. .	1,083	5	34	90	..	300	..	..	..	..	1,512	
16. Common lodging houses .. .. .	..	..	..	..	..	..	..	(a)	242	..	242	
17. Canal boats .. .. .	..	..	..	..	..	..	..	(a)	317	..	317	
18. Sites for tents, vans, sheds, etc. .. .. .	2	1	..	4	..	..	..	(a)	167	..	174	
19. Tents, vans or sheds .. .. .	..	7	1	8	..	..	..	(a)	703	..	719	
20. Other visits not included above .. .. .	2,056	770	799	1,097	..	13,525	..	(a)	733	..	18,980	
FOOD AND DRUGS PREMISES.												
21. Dairies .. .. .	..	..	..	..	..	..	..	..	..	556	556	
22. Pasteurising and sterilising plants .. .. .	..	..	..	..	..	..	..	..	..	157	157	
23. Bottled Milk Shops .. .. .	..	..	..	..	..	..	..	..	..	20	20	
24. Railway stations .. .. .	..	..	..	..	..	..	..	..	..	..	..	
25. Ice-cream .. .. .	61	187	156	121	1	..	..	..	..	..	526	
26. Fried Fish .. .. .	81	166	76	87	..	..	..	..	..	..	410	
27. Pickles and sauces .. .. .	1	..	14	2	2	..	..	..	..	..	19	
28. Sausages and pork products .. .. .	8	53	93	20	9	..	..	..	..	..	183	
29. Other registered premises .. .. .	22	6	37	25	1	..	..	..	..	..	91	
30. Bakehouses .. .. .	78	44	68	56	51	..	..	..	..	..	300	
31. Private slaughterhouses .. .. .	..	..	..	..	..	..	..	..	..	1,245	1,245	
32. Butchers .. .. .	128	86	134	96	3	..	..	..	..	61	508	
33. Provision merchants .. .. .	28	12	41	270	5	..	..	..	..	107	463	
34. Restaurants, cafes, kitchens .. .. .	8	6	27	19	26	..	..	..	..	163	240	
35. Markets .. .. .	..	..	..	..	..	..	..	..	..	449	449	
36. Other food premises .. .. .	170	116	1,675	217	14	..	..	..	..	67	2,259	
37. Food manufacturing premises .. .. .	..	..	..	..	..	..	..	..	..	11	11	
38. Visits for enquiry .. .. .	121	77	823	34	..	..	..	..	..	605	1,660	
39. No access visits .. .. .	..	..	..	..	..	..	..	..	..	39	39	
40. Attendance at Court .. .. .	..	..	..	..	..	..	..	..	..	15	15	
41. Visits re adulterated samples .. .. .	..	..	..	..	..	..	..	..	..	43	43	
42. Notices served under Reg. 20 M. & D. Regs. .. .. .	..	..	..	..	..	..	..	..	..	..	..	
PHARMACY AND POISONS ACT.												
Visits paid to premises:—												
43. New applicants for listing .. .. .	..	..	..	..	..	..	..	..	..	6	6	
44. Routine inspection .. .. .	..	..	..	..	..	..	..	..	..	1	1	
45. Unlisted premises .. .. .	..	..	..	..	..	..	..	..	..	2	2	
46. Other visits .. .. .	..	..	..	..	..	..	..	..	..	4	4	
47. No access visits .. .. .	..	..	..	..	..	..	..	..	..	4	4	
RAG FLOCK AND OTHER FILLING MATERIALS ACT.												
Visits paid to premises:—												
48. Registration .. .. .	..	..	..	..	..	..	..	..	..	..	..	
49. Licensing .. .. .	..	..	..	..	..	..	..	..	..	..	..	
50. Routine inspection of Registered premises .. .. .	..	..	..	..	..	..	..	..	..	..	..	
51. Routine inspection of Licensed premises .. .. .	..	..	..	..	..	..	..	..	..	..	..	
52. Enquiries .. .. .	..	..	..	..	..	..	..	..	..	..	..	
53. No access visits .. .. .	..	..	..	..	..	..	..	..	..	..	..	
FERTILISERS AND FEEDING STUFFS ACT												
Visits paid to premises:—												
54. Enquiries .. .. .	..	..	..	..	..	..	..	..	..	4	4	
55. Other visits .. .. .	..	..	..	..	..	..	..	..	..	1	1	

## WORK DONE BY PUBLIC HEALTH INSPECTORS, 1960.—contd.

ANALYSIS OF INSPECTIONS		North Div.	South Div.	East Div.	West Div.	Facto- ries Div.	Hous- ing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
<b>DISEASES OF ANIMALS ACTS.</b>										
Visits paid to piggeries :—										
58.	Inspection .. .. .	..	..	..	..	..	..	..	370	370
57.	Enquiries .. .. .	..	..	..	..	..	..	..	2	2
Visits paid to farms :—										
58.	Warble Fly .. .. .	..	..	..	..	..	..	..	82	82
59.	T.B. Order—Disinfection .. .. .	..	..	..	..	..	..	..	..	..
60.	Foot and mouth disease .. .. .	..	..	..	..	..	..	..	..	..
61.	Anthrax .. .. .	..	..	..	..	..	..	..	..	..
Visits paid to :—										
62.	Whitkirk Auction Mart .. .. .	..	..	..	..	..	..	..	41	41
63.	Poultry Dealers .. .. .	..	..	..	..	..	..	..	56	56
64.	Poultry Market and Shows .. .. .	..	..	..	..	..	..	..	6	6
<b>TRADES AND BUSINESSES.</b>										
65.	Factories with mechanical power .. .. .	..	..	..	..	1,308	..	..	..	1,308
66.	Factories without mechanical power .. .. .	..	..	..	..	13	..	..	..	13
67.	Other premises, constructional work, etc. .. .. .	..	..	..	..	30	..	..	..	30
68.	Workplaces .. .. .	..	5	3	..	329	..	..	..	337
69.	Hairdressers .. .. .	8	14	13	46	2	..	..	..	83
70.	Shops .. .. .	1	8	..	3	354	..	..	..	366
71.	Outworkers .. .. .	..	..	..	..	..	..	..	..	..
72.	Offensive trades .. .. .	9	7	66	3	2	..	..	..	87
73.	Visits for enquiry .. .. .	..	32	7	5	848	..	..	..	892
<b>SMOKE ABATEMENT.</b>										
74.	Smoke observations .. .. .	38	2	1	16	220	..	..	..	277
75.	Grit deposit records .. .. .	..	..	..	..	286	..	..	..	286
76.	Boiler plant .. .. .	7	..	..	..	296	..	..	..	303
77.	Visits for enquiry .. .. .	940	2	1	2	1,936	..	..	..	2,881
<b>GENERAL.</b>										
78.	Rodent infestations .. .. .	13	39	86	24	2	..	*(b)21,498	..	21,662
79.	Visits re Pigeons .. .. .	..	6	..	15	..	..	(b)1,337	..	1,358
80.	Farms .. .. .	1	5	..	4	..	..	..	..	10
81.	Stables .. .. .	1	2	..	10	..	..	..	..	13
82.	Pig-styes .. .. .	32	244	15	95	..	..	..	..	386
83.	Poultry and other animals .. .. .	4	17	6	26	..	..	..	..	53
84.	Water supply .. .. .	156	117	105	92	7	..	..	..	477
85.	Infirm and diseased persons .. .. .	..	..	..	..	..	..	..	..	..
86.	Watercourses and ditches .. .. .	11	7	9	6	..	..	..	..	33
87.	Culverts .. .. .	3	..	..	1	..	..	..	..	4
88.	Other nuisances .. .. .	16	5	23	20	..	..	..	..	64
89.	Public conveniences .. .. .	55	120	104	134	1	..	..	..	414
90.	Visits for enquiry .. .. .	622	760	365	426	13	428	..	..	2,614
91.	No access visits .. .. .	1,705	1,140	536	974	264	339	..	..	4,958
92.	Other visits (not included in above) .. .. .	122	66	92	42	96	2	..	..	420
<b>REPAIRS AND IMPROVEMENTS.</b>										
93.	Roofs, valleys gutters, flashings, etc. .. .. .	145	211	133	216	..	..	..	..	705
94.	Chimney stacks, flues, pots, etc. .. .. .	26	45	49	33	..	..	..	..	153
95.	Baves spouts .. .. .	93	115	55	125	..	..	..	..	388
96.	Fallpipes .. .. .	77	63	56	44	..	..	..	..	240
97.	Walls, brickwork, pointing .. .. .	41	93	42	85	..	..	..	..	261
98.	Damp-proof courses provided .. .. .	5	..	..	1	..	..	..	..	6
99.	Dampness otherwise remedied .. .. .	15	37	24	15	..	..	..	..	91
100.	Wallplaster .. .. .	20	58	36	45	..	..	..	..	159
101.	Ceilings .. .. .	6	25	28	20	..	..	..	..	79
102.	Floors .. .. .	10	21	30	19	..	..	..	..	80
103.	Windows, frames, cords, etc. .. .. .	24	69	16	67	..	..	..	..	176
104.	Doors, door-frames .. .. .	17	15	10	17	..	..	..	..	59
105.	Ovens, fire-ranges, grates, etc. .. .. .	13	19	4	18	..	..	..	..	54
106.	Washing boilers, scipots, etc. .. .. .	1	1	2	2	..	..	..	..	6
107.	Sinks, lavatory basins, etc. .. .. .	7	6	14	39	..	..	..	..	66
108.	Waste pipes .. .. .	23	32	29	48	..	..	..	..	132
109.	Water supply provided .. .. .	1	3	11	2	..	..	..	..	17

\* Includes 9,402 for sewerhauling

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## PREVENTION OF ATMOSPHERIC POLLUTION

BY

J. H. WYATT

*Deputy Chief Public Health Inspector*

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Recordings of the degree of atmospheric pollution continued during 1960 with the aid of instruments situated at stations in various parts of the city. The approximate situation of these stations and also some indication of the degree of pollution recorded is indicated on the map opposite page 226. There are 8 stations, each equipped with a standard deposit gauge and a lead dioxide instrument for the measurement of sulphur pollution of the air, at Hunslet, Headingley, Temple Newsam, Market Buildings, Armley Park, St. James's Hospital, Burley Park and Roundhay Hall. They are situated, so far as this is possible, to monitor the whole area of the city and to give a picture of the level of pollution in various districts. The site of the Hunslet station has recently been changed because of recurring interference and damage, and it is now on Hunslet Moor in a compound used by the Parks Department. During 1960 the sites of all these stations were visited and approved by a representative of the Department of Scientific and Industrial Research. Towards the end of the year, however, discussions were in progress about the usefulness of the various instruments and in particular of the lead dioxide instruments used for the measurement of sulphur pollution of the atmosphere. The Fuel Research Station of the Department of Scientific and Industrial Research says that the lead dioxide instrument merely registers the rate of reaction to the sulphur dioxide in the air with a lead dioxide surface, the result depending not only upon the concentration of sulphur dioxide, but also on the temperature, wind speed, humidity and the like. The station now thinks therefore, that these instruments are unreliable in detecting trends in pollution. It may well be that their use will be abandoned during the coming year.

In addition to the eight stations above-mentioned there are smoke filter and volumetric sulphur dioxide measuring instruments at five other sites in the city. These are (i) The Public Health Department Annexe, 12, Market Buildings, Leeds, 1. (ii) The Department

of Preventive Medicine and Public Health, 32, Hyde Terrace Leeds, 2. (iii) The Day Nursery, Blackman Lane, Leeds, 2. (iv) The Y.W.C.A. Hostel, Lovell Street, Leeds, 7 and (v) The Maternity and Child Welfare Clinic, Park Square, Leeds, 1. The instruments at 12, Market Buildings have been in operation since October, 1950, but the other four were not installed until August, 1957. These four were in fact provided at the request of the Fuel Research Station of the Department of Scientific and Industrial Research in order to record the effect of making the Leeds Central Smoke Control Order. They are situated in the Central Smoke Control Area which will become operative on June 1st, 1962. It is thought that the 5 years of records which will have been obtained by then will be directly comparable with those taken after the coming into operation of the Smoke Control Order, and it is anticipated that a reduction in the pollution of the atmosphere will be recorded.

During 1960 a further smoke filter and volumetric sulphur dioxide instrument was installed at St. Mary's Church of England School, Church Street, Hunslet, in order to monitor the effects of acid gases emanating from a nearby chemical works. The recordings were required in order to give some guidance as to the maximum height of new flat development in the vicinity of this factory, and the station was operated for a limited period only.

The Department has a spare standard deposit gauge which is used for experimental purposes. It is at present installed on the roof of a foundry in the city in an attempt to measure solid deposits emitted from cupolas at that foundry.

The examination of the deposit gauges and the lead dioxide instruments is done monthly, and the tests of the smoke filter and volumetric sulphur dioxide instruments daily. All testing is done by Mr. R. A. Dalley, City Analyst, and his staff; I must again express my appreciation of the help he has given us in this respect and of his advice and assistance in the efficient operation and the maintenance of the equipment.

All the stations mentioned are provided and run by the Health Department, but in addition the Central Electricity Generating Board has eight stations sited so as to monitor emissions from Skelton Grange Power Stations. Four of these have deposit gauges

and lead dioxide instruments, the other four have lead dioxide instruments only. Four of these stations are situated outside the Leeds boundary, but the results of those situated within the boundary are available to the Department in assessing pollution levels in the area of the city adjoining the Power Station.

In my report for 1959 I said that the pollution figures for that year showed an improvement over those for 1958, but that in my opinion this was due to the very fine summer of 1959. The deposit gauge figures for 1960 gave a consistently higher reading than those for 1959 for all stations except Hunslet. The result of the Hunslet station were probably affected by the re-siting of the station in 1960.

**Standard Deposit Gauges.**—The table on page 243 shows the monthly deposits in English tons per square mile for the years 1959 and 1960. The highest monthly average deposit was recorded in Burley Park, which had a monthly average of 26·22 tons per square mile over the whole year. The Hunslet gauge had consistently shown the highest monthly average for some years, but was, as previously mentioned, re-sited during the year, and the reduction in the readings has probably been due to this.

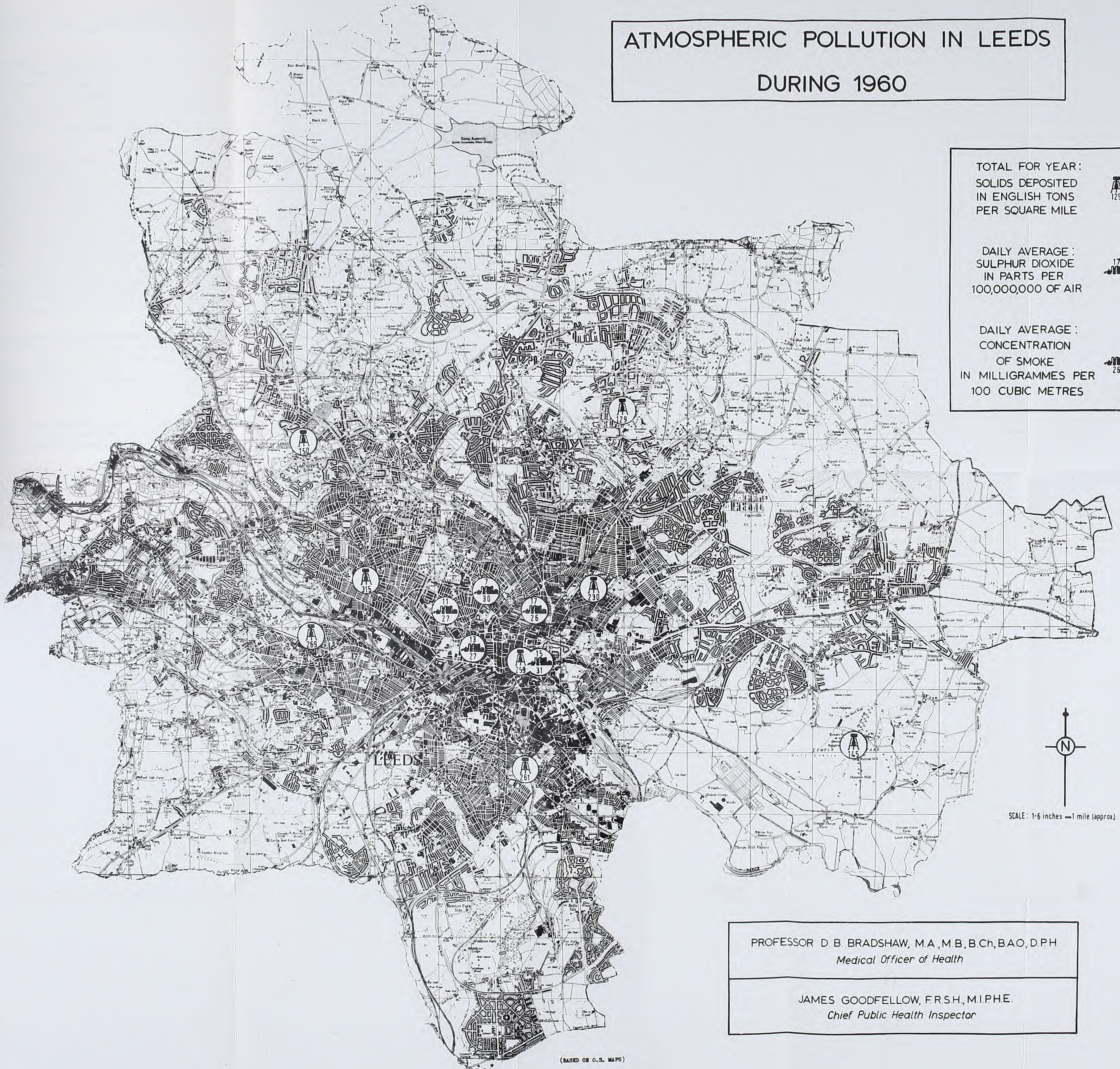
The station giving the lowest monthly average was again Roundhay, which in 1960 recorded a monthly average of 10·75 tons per square mile as compared with 10·18 tons for the previous year. This station has operated since 1958 and has each year returned low deposit figures.

The experimental standard deposit gauge, which is at the moment on the roof of a foundry, continues to record increasing and very high local deposits. When the gauge was first installed in 1958 the average for the year was 46·56 tons per square mile. In 1959 the average was 47·49 tons per square mile, and in 1960 the average rose to 67·24 tons per square mile, equal to a total deposit during the year of 806·86 tons per square mile. This is in spite of the installation of improved and increased capacity arresting devices. The foundry has of course considerably increased its production during this period.



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 17

26



SCALE: 1-6 inches = 1 mile (approx.)

JAMES GOODFELLOW, F.R.S.H., M.I.P.H.E.  
*Chief Public Health Inspector*

(BASED ON O.S. MAPS)





The table on page 242 sets out the deposits of solids recorded by standard deposit gauges in the city for the years 1930—1960 inclusive.

The report upon the various atmospheric pollution measuring instruments made by the Fuel Research Station of the Department of Scientific and Industrial Research, which was mentioned in the introduction to this section of the Annual Report stated that the results of the deposit gauges had been of great use to the Department in the past in building up a picture in broad outline of the extent of grit and dust fall in towns throughout the United Kingdom, but that there was now some doubt as to the usefulness of such gauges in a national survey of air pollution. The report went on to say that the distribution of grit and dust is very local, and that in order to give a detailed national picture of grit and dust fall, a fantastically large number of deposit gauges would be required. It indicated that the real use of the deposit gauge is a local one to give each local authority information about grit and dust fall in its own area, and in particular about grit and dust from individual factories. Local authorities have a duty under the Clean Air Act to satisfy themselves that the best practical means are taken for reducing emissions of grit and dust, and measurements made with deposit gauges can be of great help to them in discharging those duties. The report hoped that many local authorities would continue to operate their gauges for their local purposes, so that enough results would be obtained to continue to give a sufficient, if rather rough and ready, idea of grit and dust fall throughout the urban districts of the country.

#### **Estimation of Atmospheric Pollution by the Lead Dioxide Method.—**

The table on page 244 sets out the results of the examination of these instruments during the years 1959–60. The station showing the highest monthly average of atmospheric sulphur pollution was again Market Buildings with 3.54 milligrammes of SO<sub>3</sub> per 100 square centimetres as compared with an average of 3.87 milligrammes in 1959.

The station showing the lowest monthly average was again Roundhay with 1.50 milligrammes of SO<sub>3</sub> per 100 square centimetres as compared with 1.58 milligrammes for 1959.



The monthly average of  $\text{SO}_3$  in milligrammes per day, per 100 square centimetres, for all stations in the city is graphically illustrated on page 245 and a direct comparison is given between the amounts for 1959 and 1960. The graphs show quite clearly the increase in sulphur emissions during the months when domestic fires are commonly in use.

In the case of the year 1960 the apparent all round reduction in the sulphur pollution recorded may well have been due to the wet weather which tends to wash the sulphur gases out of the atmosphere, and also to the fact that 1960 was a year in which comparatively few serious fogs occurred.

I referred to the growing doubts as to the value of the lead dioxide instrument in the opening section of this report, and it seems likely that in view of the criticism of the results obtained its use may be abandoned in the near future in favour of the volumetric sulphur dioxide instrument.

**Concentration of Smoke and Sulphur Dioxide by the Smoke Filter and Volumetric Method.**—Records from the five instruments operated by the department are set out in the tables on page 240 and 241. The concentration of sulphur dioxide in parts per million of air recorded at the Y.W.C.A. Hostel has been consistently higher than that recorded at the other four stations, probably due to the fact that a cupola is operated about 100 yards from the site of the installation. This indicates clearly the sensitivity of this particular type of apparatus.

**Clean Air Act, 1956.**—*Prohibition of Dark Smoke from Chimneys.*—The law with regard to this is contained in Sections 1 and 2 of the Clean Air Act, 1956, and in Regulations made by the Minister under provisions of Section 1. Two sets of Regulations control the emission of dark smoke from chimneys, namely, the Dark Smoke (Permitted Periods) Regulations, 1958, which deals with emissions from chimneys of buildings, and the Dark Smoke (Permitted Periods) (Vessels) Regulations, 1958, which deals with emissions from chimneys of vessels.

Section 2 of the Act allows for temporary exemption for buildings where it has been found impracticable up to the present time to

alter or equip them so as to enable them to conform to the provisions of Section 1 of the Act with regard to smoke emissions. One application for such exemption has been received during the year. This application was in fact, for the continuation of a previous exemption in respect of certain coal-fired producer gas furnaces. The firm operating these furnaces applied for an exemption for a limited period until the furnaces could be adapted for oil firing. The exemption was granted in 1959 for twelve months and renewed in 1960 for a further period of 9 months. The extension was due to delay in the delivery of materials for the adaptations. The work is proceeding as rapidly as possible, and it is anticipated that it will be completed before the date of the expiration of the temporary exemption.

During 1960, 277 smoke observations were taken, and 42 Notices were served for contravention of the Dark Smoke (Permitted Periods) Regulations. In addition to the observations 303 visits were paid to boiler plant in order to give advice on the methods to be adopted to comply with the Regulations.

During the year no prosecutions were undertaken for contravention of Section 1 of the Act, but several firms were warned that the performance of their chimneys was unsatisfactory.

*The Installation of New Furnaces and Prior Approval of Furnaces.* Section 3 of the Clean Air Act requires that any person who installs a new furnace must notify the local authority. It also provides that any new furnaces which are installed must be capable of operating continuously without emitting smoke while burning fuel of the type for which they were designed. The Section also contains provision for prior approval of new furnaces by the local authority.

During 1960, 99 notifications were received of the installation of new furnaces. There were in addition 10 applications for prior approval of boiler plant, and all these were approved subject to various conditions. One of the conditions which was formerly included in prior approvals was that a smoke alarm be fitted so as to give warning of excessive smoke emissions. We have been advised that this condition should not be imposed, and it is no longer inserted as a condition of approval. There are, however, many unattended

plants, particularly those which are oil-fired, in which no warning or indication is given when smoke is being emitted. In view of this we have made it a practice, in notifying an applicant that his plant has been approved, to ask him to consider the provision of a smoke alarm for unattended plant.

*Control of Grit and Dust from Furnaces.*—This is dealt with by Sections 5 and 9 of the Clean Air Act. They provide that the occupier of any building in which a new furnace is installed, and which burns solid fuel or solid waste, must use any practicable means there may be of minimising the emissions of grit and dust. The Act also requires that if a furnace is designed to burn pulverised fuel or to burn solid fuel or solid waste at a rate in excess of one ton per hour, it must be provided with apparatus for arresting grit and dust which has been approved by the local authority.

Several complaints have been received about emissions of grit and dust in the city, the principal offenders being cupolas used for iron founding, and action of various kinds has been taken to deal with the complaints. Some 286 grit deposit records have been taken during the year in connection with these complaints.

*Heights of Chimneys.*—Section 10 of the Clean Air Act enables the local authority to control heights of chimneys from certain types of new buildings, and in Leeds it is supplemented by the provisions of Section 120 of the Leeds Corporation Act, 1956. This latter section extends the control to all types of new buildings where the height of any new chimney shown on plans is likely to be insufficient to prevent nuisance. The power is linked with the submission of new building plans, and the control is exercised by the rejection of the plans by the City Engineer after advice from the Health Department.

In 1960, 97 plans on which new chimneys were shown were examined and commented upon. In many cases the heights of these chimneys had already been discussed by my inspectors with the architects concerned, but in 18 cases no such discussions had taken place and the chimneys were required to be extended. In all cases these extensions were obtained, and in no instance was it necessary

for the plans to be rejected, although several were deferred by the City Engineer until agreement had been reached between the architect and this Department.

There have been instances where plans have been approved with a chimney of a particular height, and where a change in the type of fuel to be used has necessitated a revision of this height. In these instances there seems to be some doubt as to whether it is possible to enforce a new height even though there may have been radical changes in the fuel burning installation.

In considering the height required for any chimney, consideration is paid to the four points set out in the sections of the Act concerned. These are :—

- (a) the purpose of the chimney
- (b) the position and description of buildings nearby
- (c) the levels of the neighbouring ground, and
- (d) any other matters requiring consideration in the circumstances.

Under the last item regard is paid to the probable emission of sulphur fumes from the plant in question.

The amount of sulphur dioxide emitted over a period from large boiler plant burning either solid or liquid fuels can be very considerable, and many of the harmful effects of smoke pollution are said to be caused by acid gases such as these. In assessing chimney heights therefore, attention is paid to the ground level concentration of sulphur dioxide which might be produced by emissions from a particular stack, when the usual fuel is being burned at the maximum continuous rating of the furnace. Chimney heights are then calculated which would not give an unreasonably high concentration of sulphur dioxide at ground level. In Leeds we have accepted that a reasonable maximum limit is 0.3 parts per million of sulphur dioxide.

In addition to the emission of sulphur emissions we also pay particular attention to the possibility of nuisance from grit and dust.

The whole question of chimney heights is one which is extremely difficult to resolve, and it often involves disputes between the



architects on the one hand, who are concerned with the appearance of the building, and this Department on the other hand, which is concerned with the effects of chimney emissions upon health. There is at present a working party sponsored by the Department of Scientific and Industrial Research which is considering the whole question of chimney heights. It is hoped that when this body issues its report, some further guidance will be available to assist local authorities in this very difficult question.

**Smoke Control Areas.**—Section 11 of the Clean Air Act, 1956, gives local authorities the power to establish Smoke Control Areas within their districts. The process of making the Orders defining Smoke Control Areas is a continuous one, and the areas in which steps have been taken are set out in the table printed on page 239.

Up to the end of 1960, sixteen areas had been considered and approved in principle by the Health Committee, and by the Housing Committee where those areas included Corporation properties. Five other areas, namely, Beckett Park, Tinshill Nos. 1 and 2, Spen Hill and Ireland Wood, have been approved in principle by the Health Committee, but have not as yet been approved by the Housing Committee because of difficulties which have arisen about the types of fireplaces installed in certain houses on these estates.

Of the areas so far designated only No. 2 the Central Area and No. 12 the Sutton Proposed Area, will require contributions towards the costs of adaptation of fireplaces. The remaining areas contain buildings which have been erected since 5th July, 1956, that is, the date of the passing of the Clean Air Act, and these should have been fitted at the time of erection with appliances which are capable of burning authorised fuels.

The table above-mentioned sets out the position as regards the confirmation of each Area, and the date in which the Orders are to come into operation. It will be noted that during the year two Orders were made; these were the City of Leeds No. 4 (Cow Close) Smoke Control Order, 1960, and the City of Leeds No. 5 (Armley Heights) Smoke Control Order, 1960. Both these Orders were confirmed by the Minister on 23rd December, 1960, and the operative date is intended to be 1st June, 1961.



*Sticks and Paper.*—In July, 1960, Circular No. 28/60 was issued by the Ministry of Housing and Local Government which referred to the use of sticks and paper in Smoke Control Areas. The circular stated that the Minister, after considering numerous enquiries about the use of sticks and paper for lighting fires in houses which have no town gas, but which stand in Smoke Control Areas, is of the opinion that it would be unreasonable to insist upon the provision of gas supplies. He thinks that in time other methods of lighting fires smokelessly will be devised, but that for the time being at least sticks and paper are likely to be commonly used. In his view the small amount of smoke caused in this way must be accepted in the general interest of making progress with the creation of Smoke Control Areas. He suggested, therefore, that legal cover for the use of sticks and paper in Smoke Control Areas should be given by the use of the power of exemption contained in the Act, and he further suggested that local authorities should give such exemption in general terms whenever they make an Order which includes buildings in which there is no gas supply. In Leeds there are many such premises in the existing areas, and an amending Order may well have to be promoted to regularise their position in due course.

*Roman Avenue Smoke Control Area.*—The City of Leeds No. 1 (Roman Avenue) Smoke Control Order, 1958, came into operation on 1st October, 1959. In the latter part of 1959 and during 1960 frequent observations were taken in this area to see whether the tenants were in fact honouring the Order. It was found that the majority were complying, but two or three verbal warnings were given to occupiers that they should use authorised fuels only, and in one case it was found necessary to write to the tenant to warn him that he was contravening the Order by using coal as a fuel. All these warnings appear to have been effective, and no legal action was required in order to enforce the Order.

*Central Smoke Control Area.*—The City of Leeds No. 2 (Central Area) Smoke Control Order, 1959, was confirmed by the Minister on 29th July, 1960. Its operative date is to be on 1st July, 1962. The Order, as confirmed, contains three schedules. The first of these schedules lists buildings in the area which are exempted from the operation of the Smoke Control Order. These buildings are those

which stand within areas which are to be cleared under Housing Act procedure or other redevelopment proposals. In connection with this it is necessary to point out that towards the end of the year the quinquennial review of the Development Plan of the City was begun by the City Engineer, and it is likely that considerable additions may have to be made to this list of buildings which may now be cleared under redevelopment proposals. It would seem that eventually an Order amending the original Order may have to be submitted for confirmation.

The second schedule referred to, exempts certain types and classes of fireplaces in the area from the operation of the Smoke Control Order. In general the fireplaces exempted consist of wood burning boilers and incinerators (wood not being a fuel authorised to be burnt in Smoke Control Areas) and certain other types of incinerators at the various hospitals in the area. A particular exemption in this schedule is of a coal-fired Babcock and Wilcox boiler with chain grate stokers which has been installed at the Engineering Department of the University of Leeds. The exemption is necessary because experiments are to be carried out in connection with problems relating to atmospheric pollution.

The third schedule attached to the Central Area Smoke Control Order exempts fireplaces, other than fireplaces fired by pulverised fuel, constructed before 31st December, 1956, and equipped with mechanical stokers. Fireplaces installed after 31st December, 1956, and fitted with mechanical stokers, were exempted by the Minister by the Smoke Control Areas (Exempted Fireplaces) Order, 1959. This third schedule of the Central Area Smoke Control Order extends the exemption to fireplaces installed before that date upon conditions, one of which reads as follows :—

- “ 3. Dark smoke as defined by Section 34(2) of the Clean Air Act, 1956, shall not be emitted from a chimney serving the fireplace for a period of more than two minutes in the aggregate in any period of thirty minutes, except for an emission which is solely due to the lighting up of a furnace which was cold, provided all practicable steps are taken to prevent or minimise the emission of dark smoke ”.



SMOKE CONTROL AREA



### SMOKE CONTROL AREA

Back-to-back range in Quarry Hill Flats now fitted with an experimental adaptor costing £6 with a coke-deepening bar and a new grate with 8" bar seating for the efficient and economic burning of sub-bituminous coal and with internal non-inferior.

This is a much stricter standard than is contained in the Dark Smoke (Permitted Periods) Regulations, 1958, which apply generally to emissions of smoke from chimneys of buildings.

After the confirmation of the Order by the Minister on 29th July, 1960, the process of notifying the owners of property in the area where adaptations to fireplaces were necessary was begun. The area is very large and the letters requesting adaptations were, therefore, sent out in batches. Up to the end of the year some 504 letters about adaptations had been sent, together with the necessary literature explaining the purpose of the Area and the method of claiming the grants towards the cost of adaptation.

Progress up to the end of 1960 was very slow, and in fact no claims were made up to the end of the year for the payment of grant, although a few adaptations had been carried out. Difficulties are being experienced in the adaptation of certain types of ranges, and experiments were carried out to find out the best way of dealing with those.

*Alwoodley Smoke Control Area.*—A special note is necessary about the City of Leeds No. 3 (Alwoodley) Smoke Control Order, 1959. This was confirmed by the Minister on 11th November, 1959, and came into operation on 1st June, 1960. The Order, when made, referred to 33 acres of open land which was to be developed for residential purposes. Building commenced in 1960 and is still in progress and difficulty is being experienced in making sure that the occupiers of the new houses are aware that their houses are in a Smoke Control Area. Many visits have been and are being paid in this area and letters are being sent to the occupiers as and when the houses come into occupation.

*Sutton Proposed Smoke Control Area.*—In the table of Smoke Control Areas previously mentioned, No. 12 is marked as "Sutton Area". This consists of the Sutton Housing Estate which is owned by a private Housing Association who have estates in many parts of the country.



The first approach about the making of an Order to cover this estate came from the Secretary of the Housing Association, who said that it was the general policy of his Association to make all their estates throughout the country smokeless. They requested that an Order should be made to deal with their property, and they have made arrangements for the necessary adaptations to be carried out. The works which they propose to do are in excess of what we would regard as "reasonable works", but the owners accept that the local authority's contribution towards the costs will be based strictly upon what we regard as the minimum reasonable works necessary to adapt the fireplaces in the houses so as to enable the tenants to burn authorised fuels.

*The Abatement of Smoke Nuisances.*—Section 16 of the Clean Air Act provides that smoke other than smoke from the chimneys of private dwellings or dark smoke emitted from the chimneys of buildings, shall, if it is a nuisance to the inhabitants of the neighbourhood, be a statutory nuisance in accordance with the provisions of Part III of the Public Health Act, 1936. This power is intended to deal with smoke emissions which do not contravene other provisions of the Clean Air Act. Few complaints are received which can be dealt with under these powers, but a particular one which came in during the year referred to the burning of car bodies to recover valuable metal scrap. This created a very serious nuisance, and strong representations from the Department were necessary before the nuisance ceased. It would seem that this problem is likely to increase as we understand that this method of breaking up car bodies is the only really economic one possible at the present time.

*Alkali, Etc., Works.*—22 firms in Leeds are registered under the provisions of the Alkali, Etc. Works Regulations Act, 1906. These firms are controlled, so far as the processes are concerned, by H.M. Inspector of Alkali, Etc. Works. H.M. Inspector is responsible for the control of smoke emissions from chimneys which are used in connection with the processes carried on at these premises. During the year complaints were received about nuisances from registered premises dealing with lead recovery and the manufacture of salt glazed stoneware articles, and from an electricity generating station.

In my last year's report I referred to a nuisance from grit emitted from two large hot blast cupolas at a foundry. The Alkali Inspector initially required the provision of cyclone type arresters for these cupolas and the discharge of the effluent gases to a chimney stack 120 ft. in height. This work has not yet been carried out because the erection of the new chimney requires land which at the moment is subject to clearance procedure. Complaints are still being received about this, and the Alkali Inspector is being pressed to take steps to abate this nuisance.

*Colliery Spoilbanks.*—During the year complaints were received about nuisance from smoke and smells from a disused spoilbank in the city. Following pressure by this Department the spoilbank was excavated so as to locate the seat of the fire and at the end of the year the nuisance had ceased. This spoilbank was not in fact dealt with under the provisions of the Clean Air Act because it was no longer in active use for the deposition of refuse from a mine.

Complaints have been received for a number of years about a burning colliery spoilbank in the southern part of the city. This bank is in active use. It has been found impossible to completely control the fire in this case, but the owners are doing whatever is reasonably practicable to minimise the nuisance.

*Control of Smoke from Railway Engines.*—Section 1 of the Clean Air Act and the Dark Smoke (Permitted Periods) Regulations apply to railway engines as if they were buildings. No complaints have been received about excessive smoke from railway engines during the year and with the dieselisation programme of British Railways there has been a noticeable improvement in the amount of smoke from the railways in the city centre during the year.

*Control of Smoke from Vessels.*—No complaints have been received during the year about smoke emissions from steam-driven tug boats on the river or canal and no action has, therefore, been taken under the relevant section of the Act.

*Exemption for the purposes of Investigation and Research.*—Section 21 of the Act empowers a local authority who is satisfied

that it is expedient so to do, to exempt certain chimneys and furnaces from the provisions of the Clean Air Act while they are being used for the purpose of investigation and research into the problem of air pollution. An application for such exemption was received from the University of Leeds in respect of the chimney of the central boiler house, while certain boilers which are connected to this chimney are being used for this purpose. This application was originally made and exemption from the provisions of Sections 1, 5 and 16 given in 1958. It was renewed in 1959 for twelve months and renewed again in 1960, for a further period of twelve months. The renewal was conditional upon a register being kept of all periods when research and investigation were being carried out, and that such register be available at all reasonable times for inspection by authorised officers of the City Council.

*Building Byelaws.*—The City Council Building Byelaws now require the provision in new buildings of arrangements for heating or cooking calculated to prevent smoke emissions. In most cases approved appliances satisfactory for burning authorised fuels are installed, but on occasion some builders are found to be reluctant to include provision for these slightly more expensive appliances. The enforcement of these Byelaws is in the hands of the City Engineer.

**General.**—The work of the public health inspectors on smoke abatement during 1960 can be summarised as follows :—

Smoke observations.. ..	277
Grit deposit records .. ..	286
Visits to boiler plant .. ..	303
Visits for other enquiries ..	2,881

## CITY OF LEEDS — SMOKE CONTROL AREAS

NAME OF AREA	CLASSES OF BUILDINGS				Acreage of Area	Date approved in principle by Sub-Health Committee (S.F. & D.)	Date approved in principle by Housing Committee	Date Order Made	Date Order Confirmed	Date Order in Operation
	Domestic	Commercial	Industrial	Other						
No. 1 (Roman Avenue)	162	—	—	—	20	20-12-57	16-1-58	16-5-58	31-3-59	1-10-59
No. 2 (Central Area)	6,418	3,771	795	1,167	1,168	21-6-57	—	20-3-59	29-7-60	1-7-62
No. 3 (Alwoodley)	144	—	—	—	33	16-1-59	—	19-6-59	11-11-59	1-6-60
No. 4 (Cow Close)	598	5	1	3	68	12-2-60	17-3-60	15-7-60	23-12-60	1-6-61
No. 5 (Armley Heights)	640	8	1	2	63	12-2-60	17-3-60	15-7-60	23-12-60	1-6-61
No. 6 (Tong Road)	256	4	1	—	22	11-3-60	21-4-60	—	—	—
No. 7 (Stonebridge Lane)	110	—	1	—	10	11-3-60	21-4-60	—	—	—
No. 8 (Gamble Hill)	246	—	—	2	38	11-3-60	21-4-60	—	—	—
No. 9 (Meynell Street)	180	—	—	—	4	8-4-60	19-5-60	—	—	—
No. 10 (Silver Royd "A")	24	—	—	—	1	8-4-60	19-5-60	—	—	—
No. 11 (Silver Royd "B")	46	—	—	—	3	8-4-60	19-5-60	—	—	—
No. 12 (Sutton)	220	1	1	2	20	8-4-60	—	—	—	—
No. 13 (Brackenwood)	871	7	—	—	77	13-5-60	16-6-60	—	—	—
No. 14 (Armley Ridge Road)	62	1	—	1	21	13-5-60	16-6-60	—	—	—
No. 15 (Poplar)	154	—	—	—	23	13-5-60	16-6-60	—	—	—
No. 16 (Greenside)	247	—	—	69	7	13-5-60	16-6-60	—	—	—

**SMOKE FILTER APPARATUS.**  
Concentration of Smoke in Milligrammes per 100 cubic metres.

1960	DAILY AVERAGE					HIGHEST DAILY AVERAGE				
	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.
January ..	48	50	43	43	43	136	100	101	123	114
February ..	54	52	46	45	46	167	176	174	142	134
March ..	28	35	28	26	26	57	66	61	61	60
April ..	36	29	25	24	23	121	81	75	63	74
May ..	12	15	14	13	13	24	26	28	28	29
June ..	10	7	7	8	6*	18	17	16	16	21*
July ..	14	11	11	12	3*	24	16	18	25	7*
August ..	14	11	11	12	2*	25	18	18	21	4*
September	21	16	16	15	16	39	23	25	27	24*
October ..	39	32	28	26	28	74	57	56	57	53
November..	43	44	42	42	41	94	107	110	89	77
December..	53	60	54	56	60	153	191	146	139	183

\*Smoke apparatus defective.



SULPHUR DIOXIDE VOLUMETRIC APPARATUS.  
Concentration of Sulphur Dioxide in parts per 100 Million of Air.

1960	DAILY AVERAGE					HIGHEST DAILY AVERAGE				
	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.	Market Buildings	Blenheim	Hyde Terrace	Park Square	Y.W.C.A.
January ..	23·6	11·8	15·3	16·8	24·5	56·0	22·2	32·3	39·0	39·4
February ..	23·5	11·3	15·0	18·2	24·1	48·5	22·5	37·0	37·2	45·9
March ..	17·1	9·9	12·8	14·2	22·5	32·8	17·4	22·9	31·1	39·3
April ..	17·1	8·0	9·2	13·9	17·5	35·6	15·1	20·4	29·1	25·0
May ..	6·7	5·2	7·1	7·7	16·1	11·7	10·0	16·7	14·7	28·9
June ..	6·4	3·8	5·3	5·3	13·2	12·6	9·9	11·6	9·4	22·3
July ..	7·5	3·7	6·0	5·5	15·8	11·7	5·1	9·3	8·6	22·1
August ..	7·8	3·1	5·6	4·8	14·9	12·2	4·6	9·1	7·7	20·3
September	11·4	3·5	7·0	7·0	11·5	20·5	5·2	9·6	12·5	23·6
October ..	16·0	6·5	10·0	11·5	9·5	27·7	12·7	20·5	23·6	20·8
November..	18·4	10·1	16·1	22·4	15·8	36·2	18·1	30·6	39·2	24·1
December	23·7	13·0	18·2	25·7	19·3	54·0	26·4	40·1	47·7	39·1

DEPOSIT GAUGES RECORDS, 1930-1960.  
ENGLISH TONS PER SQUARE MILE PER ANNUM.

Year	STATIONS						
	Headingley	City Centre	York Road	Hunslet	Temple- newsam	Armley Park	St. James's Hospital
1930..	123.9	344.3	299.5	290.5	101.8	..	..
1931..	126.5	336.2	*266.9	268.5	109.3	..	..
1932..	105.8	320.7	264.7	255.6	87.5	..	..
1933..	107.86	305.0	277.83	*276.32	* 81.59	..	..
1934..	124.28	341.7	284.74	294.49	86.24	..	..
1935..	*131.92	358.88	321.25	*317.55	†108.67	..	..
1936..	136.95	381.40	301.89	290.13	*118.20	..	..
1937..	135.93	*331.53	325.35	301.71	*123.39	..	..
1938..	*119.80	359.51	289.56	*231.39	133.37	..	..
1939..	155.32	314.96	255.15	*234.74	122.67	..	..
1940..	†180.30	†413.29	†127.36	†279.58	†243.33	..	..
1941..	†188.31	†285.51	§129.75	301.31	164.21	..	..
1942..	†138.21	*371.14	..	*235.37	*159.03	..	..
1943..	186.93	389.03	..	271.82	171.43	..	..
1944..	175.37	374.50	..	277.14	†114.80	..	..
1945..	*151.29	*288.44	..	*262.11	*139.27	..	..
1946..	*146.50	326.26	..	*267.10	*166.64	..	..
1947..	121.94	288.76	..	*209.66	149.12	§176.12	\$87.27
1948..	162.78	338.02	..	213.49	*134.68	*367.06	*183.13
1949..	181.24	411.91	..	225.68	164.28	327.56	211.20
1950..	195.36	378.57	..	206.31	147.62	414.14	220.55
1951..	*228.04	403.97	..	229.99	162.32	532.86	205.88
1952..	*135.00	356.58	..	199.43	126.34	370.85	†199.00
1953..	159.28	348.84	..	183.17	117.59	400.56	*184.39
1954..	184.21	354.14	..	245.09	†109.14	383.11	182.72
1955..	*115.74	288.50	..	†310.83	*120.47	296.30	208.49
1956..	*129.81	287.22	..	†359.44	†100.97	284.95	177.16
1957..	125.46	264.27	..	385.63	*140.30	239.06	195.15
1958..	*115.75	265.82	..	*440.80	†168.64	249.96	188.00
1959..	134.67	243.59	..	†254.57	*131.86	236.84	212.94
1960..	149.89	258.78	..	*260.89	145.18	*269.04	*189.03

† 9 months  
‡ 8 months

\* 11 months  
† 7 months

† 10 months  
‡ 5 months

74.87  
204.88  
261.97  
314.61  
129.02

**STANDARD DEPOSIT GAUGES.**  
**MONTHLY DEPOSITS IN ENGLISH TONS PER SQUARE MILE.**  
**YEARS 1959 AND 1960.**

STATIONS

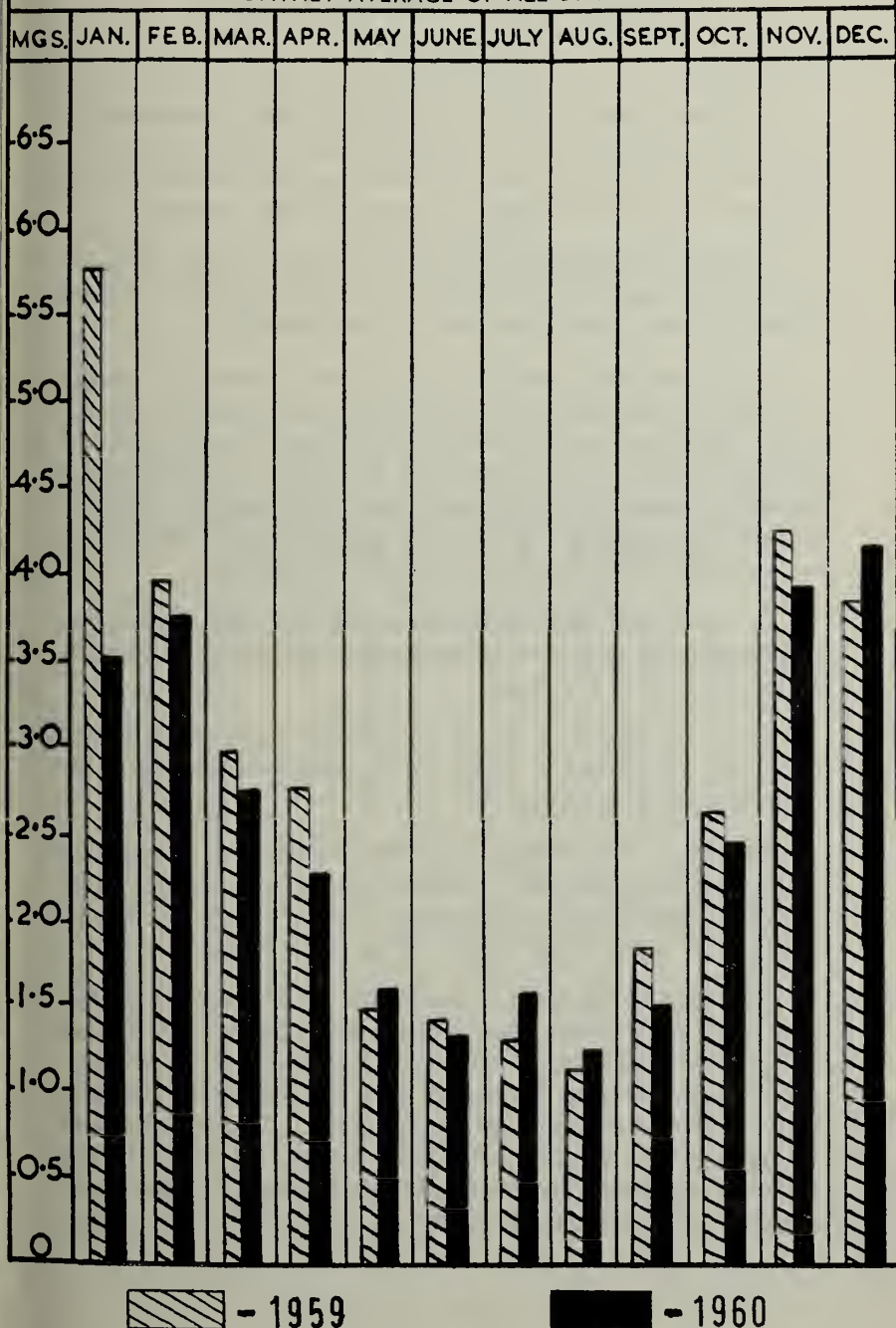
Period	Headingley		Market Buildings		Hunslet		Temple Newsam		Armley Park		St. James's Hospital		Burley Park		Roundhay	
	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960
	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960
January	13.67	11.97	29.09	25.49	43.03	22.44	12.45	15.17	30.19	33.67	23.33	19.41	25.91	26.86	†	11.79
February	9.70	17.34	12.98	23.72	26.18	33.76	8.01	10.11	14.22	30.51	12.54	22.07	9.91	53.27	6.35	11.39
March	13.13	12.37	25.56	18.73	48.90	29.85	9.77	8.98	29.99	24.94	21.18	26.74	37.59	17.44	12.36	8.99
April	17.20	8.94	27.54	15.62	†	31.87	14.66	9.31	28.62	†	20.15	15.74	23.32	17.11	15.07	8.52
May	6.85	9.01	15.06	17.60	†	25.05	7.57	15.88	15.92	16.86	†	23.28	11.72	21.66	7.97	8.68
June	9.56	10.46	19.33	14.72	†	13.67	13.00	9.97	15.35	20.65	15.04	17.65	20.54	24.85	9.53	9.67
July	8.87	9.96	16.25	20.37	46.78	14.67	†	15.02	13.38	18.31	10.13	14.90	17.67	12.52	7.51	10.44
August	3.42	11.65	6.31	25.76	†	†	5.16	8.21	5.34	16.29	5.19	15.20	5.17	17.08	4.09	12.33
September	7.29	11.32	10.80	18.72	22.25	15.07	11.86	10.29	17.24	14.43	17.19	15.57	23.14	24.77	10.76	9.29
October	14.82	12.91	27.51	23.46	25.23	31.89	17.82	9.65	21.81	23.25	18.02	17.29	31.45	14.06	11.45	9.67
November	14.86	23.54	26.39	30.58	21.18	20.73	16.54	17.91	21.36	35.06	22.84	24.90	25.28	45.96	13.01	16.22
December	15.30	10.42	26.77	24.01	21.02	21.89	15.02	14.68	23.42	35.07	23.42	17.12	30.27	39.03	13.83	12.03
Total Deposit for year	134.67	149.89	243.59	258.78	254.57	260.89	131.86	145.18	236.84	269.04	189.03	229.87	261.97	314.61	111.93	129.02
Monthly average	11.22	12.49	20.30	21.57	31.82	23.72	11.99	12.10	19.74	24.46	17.18	19.16	21.83	26.22	10.18	10.75

† Gauge tampered with.



# SULPHUR EMISSION — 1960

AMOUNT OF  $\text{SO}_2$  IN MILLIGRAMMES PER DAY PER 100 SQUARE CENTIMETRES  
MONTHLY AVERAGE OF ALL STATIONS





## PUBLIC HEALTH INSPECTORIAL STAFF

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During the year the City Council, after reviewing the establishment of public health inspectors, agreed to the appointment of four additional inspectors to bring the total establishment to 61 and also agreed to the creation, within this establishment, of 8 new posts of assistant supervisory public health inspector.

At the commencement of the year there were six vacancies for public health inspectors and during the year one inspector resigned to take up an appointment with another authority.

Six student public health inspectors were successful in passing the qualifying examination of the Public Health Inspectors' Examination Board and were appointed public health inspectors to fill existing vacancies. The nett result of the increase in establishment and the appointment of the newly qualified student public health inspectors was that at the end of the year there were still in effect five vacancies for public health inspectors on the staff.

In 1960 eight public health inspectors were successful in the Examination for Inspectors of Meat and Other Foods; six obtained Smoke Inspectors' Certificates.

Mr. J. Goodfellow, F.R.S.H., M.I.P.H.E., Chief Public Health Inspector, was elected to be one of the Deputy Chairmen of the National Society for Clean Air.

**Training.**—The training of 15 student public health inspectors continued during the year. Practical training was provided in all aspects of the public health inspector's work. Theoretical training was again arranged by the Leeds College of Technology.

The year was particularly notable for the beginning of the first year of the full-time day training course for inspectors now required by the new Regulations of the Public Health Inspectors' Examination Board. The new Regulations raise the educational standards required of student public health inspectors; the rules governing the appointment of student inspectors by the City Council were revised accordingly to take account of this and also to allow of the appointment of students from the age of 16 years and upwards.

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**Report of the  
City Analyst**

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## MUNICIPAL LABORATORY

BY

R. A. DALLEY, F.R.I.C.,

*City Analyst*

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The total number of samples received for analysis during 1960 was 8,946. This is the highest number analysed in any year since the laboratory was established in 1928, the previous highest being 8,731 in 1958.

The substantial increase in the number of samples analysed during recent years (four years ago the figure was 4,474) has been greatly aided by the provision of modern instruments, which enable many determinations to be carried out with a greater speed and accuracy than was previously possible. Unfortunately it has not been possible to provide a similar increase in accommodation and the laboratory is seriously overcrowded. A move to larger premises (designed as laboratories, rather than converted from offices) would enable the work to be carried out more efficiently and under less trying conditions than at present exist.

The general pattern of work has been similar to that of previous years, being mainly concerned with the analysis of food, drugs, fertilisers, waters and atmospheric pollution samples. A record number of cases has been investigated for H. M. Coroner, and there have been increases in the number of samples submitted by other Corporation Departments and by outside Authorities.

A major undertaking during the year was the organisation of a "Pure Food Centenary Exhibition", which was opened by the Lord Mayor in the City Museum on 29th September.

The exhibition was designed to commemorate the first "Act for Preventing the Adulteration of Articles of Food or Drink" passed in 1860, and to demonstrate the progress made in the last 100 years in establishing the purity of food and drugs.

The exhibition commenced with examples of the gross adulteration of food prevalent in 1860, including samples of sweets coloured with poisonous mercuric sulphide (red) and lead chromate (yellow); tea adulteration with horsechestnut leaves; vinegar containing sulphuric acid, and mustard so heavily adulterated with Plaster of Paris that it had set in the pot. Also included in this section were enlarged photostats from the local newspapers of 1858 describing an incident in Bradford in that year, when 21 people died and several hundred were taken ill as a result of eating sugar lozenges containing white arsenic. The arsenic had been added in mistake for the Plaster of Paris with which the lozenges were normally adulterated.

The following display-case traced, by means of old books and documents, the historical development of food legislation, commencing with the graphic title page of "Death in the Pot" published in 1820, and continuing through the Lancet Commission Reports of 1855, and a copy of the 1860 Act, to the many Food Standards Orders in force to-day.

An 1860 laboratory was next depicted, followed by a section of a 1960 Public Analyst's Laboratory. Exhibits in the former included a balance believed to have belonged to Joseph Priestley, and the first microscope ever owned by the British Government, originally used in the Customs House Laboratory for the detection of adulteration in the flour. The emphasis in the 1960 laboratory was on the complex and expensive physico-chemical apparatus in use today to enable analysts to detect the minute traces of impurities in food and drugs. The equipment used in the City Laboratory for radioactivity monitoring was shown in operation and aroused much interest.

Other sections of the exhibition dealt with the identification of colouring matter in foodstuffs and with arsenic in food. That the latter problem has spanned the years was shown by reference to the recent condemnation of consignments of imported apples reaching Leeds containing excessive quantities of arsenical spray residues.

One display case was devoted to samples which had resulted in prosecutions in Leeds during the past few years, the result of the prosecution being shown alongside each sample (pepper adulterated with wheat flour, ground almonds consisting of ground pea-nuts with almond flavouring, sausages deficient in meat and milk containing added water were a few of the examples).

In order to emphasize that the improvement in our food supply has been achieved not only as a result of the efforts of administrators but also of the food industry itself, food manufacturers in the City were invited to co-operate in the exhibition, and the final display-case was devoted to "Some of the Pure Food manufactured in Leeds".

The exhibition was well publicised by the local press, and a special feature on Pure Food was published by *The Yorkshire Post* on the morning of the opening.

A free film display on the theme of Pure Food was given each lunch time. The exhibition remained open for ten days and was well attended by the general public and by organised parties of senior children from Leeds schools.

Other activities which were not represented by actual samples have included the answering of many enquiries from industrial firms and members of the public, and lectures on the work of the laboratory to various organisations both within and outside the City. Groups of science students and others have visited the laboratory.

After such a busy year it is a particular pleasure to express to my Deputy, Mr. L. A. Perkin, and all members of the staff my grateful appreciation of their hard work and loyal support throughout the year. It is also a pleasure to express to the Supervisory Sampling Officer, Mr. H. Long, and his assistants, my thanks for their continued helpful co-operation.



## SOME RECENT PROSECUTIONS IN LEEDS

The majority of food manufacturers are jealous of their reputations and their products are of a high standard of purity, BUT "black sheep" still exist....

### ICE CREAM

50 per cent deficient in fat  
Fined £20

### BOB SAVES

Contained 48 per cent meat  
instead of not less than  
45 per cent  
Fined £25

### MILK

2 samples from the same  
farmer containing 4.3 per cent  
and 7.9 per cent added water  
Fined £15

### BRANDY

Contained 10 per cent added water  
Fined £10

### PEPPER

Adulterated with 25 per cent  
wheat flour  
Fined £10

### LEMON BARLEY

45 per cent deficient in sugar  
Fined £25

### GROUND ALMONDS

Found on analysis to be ground  
pea-nuts plus almond essence  
Fined £20

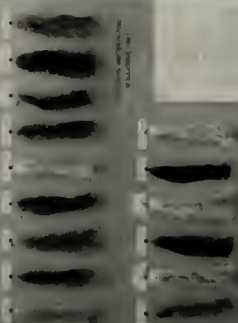
### MEAT PASTE

Contained 33 per cent meat  
instead of the legal requirement  
of at least 55 per cent meat  
Fined £20

PURE FOOD CENTENARY EXHIBITION  
LEEDS, 29th SEPTEMBER — 9th OCTOBER, 1960

# COLOURING MATTER IN FOOD

THE COLOURING MATTER IN FOOD  
IS A COMPLEX OF  
DYES AND PIGMENTS  
WHICH GIVE FOOD ITS  
CHARACTERISTIC COLOUR



ALL FOODS CONTAIN COLOURING MATTER  
WHICH MAY BE NATURE'S OWN OR  
ADDED BY MAN. THE LATTER IS  
SOMETIMES USED TO IMPROVE THE  
APPEARANCE OF THE FOOD.

THE COLOURING MATTER IN FOOD  
IS A COMPLEX OF  
DYES AND PIGMENTS  
WHICH GIVE FOOD ITS  
CHARACTERISTIC COLOUR

THE COLOURING MATTER IN FOOD  
IS A COMPLEX OF  
DYES AND PIGMENTS  
WHICH GIVE FOOD ITS  
CHARACTERISTIC COLOUR

THE CONCENTRATED COLOUR IS  
SEPARATED INTO ITS CONSTITUENT  
DYES BY CIRCULAR OR VERTICAL  
CHROMATOGRAPHY

1860

1960

The following is a summary of the analyses made during 1960:—

*Samples submitted by Public Health Department*

Food and Drug samples .. .. .	3,627
Milks for Bacteriological examination ..	752
Ice-cream for Bacteriological examination ..	48
Fertilisers and Feeding Stuffs .. .. .	12

ATMOSPHERIC POLLUTION

Deposit Gauges .. .. .	106
Lead Peroxide Cylinders .. .. .	97
Daily Smoke and Sulphur Dioxide Determinations .. .. .	3,634
	<hr/> 3,867
Water for Radioactivity measurement ..	12
Miscellaneous samples .. .. .	51
	<hr/> 8,339

*Samples submitted by other Departments*

Central Purchasing Department .. .. .	8
City Architect's Department .. .. .	3
City Coroner .. .. .	61
City Engineers' Department .. .. .	1
Education Department .. .. .	1
Transport Department .. .. .	85
Waterworks Department .. .. .	12
Weights & Measures Department .. .. .	1
	<hr/> 172

*Samples received from other Sources*

Private samples .. .. .	103
Craven District Coroner .. .. .	5
Leeds General Infirmary .. .. .	7
Leeds Group " B " Hospital Management Committee .. .. .	6
Rothwell Urban District Council .. .. .	21
Wakefield Corporation .. .. .	293
	<hr/> 435
	<hr/> 8,946
	<hr/>

## FOOD AND DRUGS

The table on pages 264 to 268 summarises the samples taken under the Food and Drugs Act, 1955.

The percentage of samples found to be adulterated or otherwise unsatisfactory was 3.0 per cent. compared with 4.4 per cent. in 1959 and 2.9 per cent. in 1958.

The table on page 182 lists the results of summonses issued in respect of those adulterated samples concerning which legal proceedings were instituted.

### MILK:—

The average composition of the 2,873 samples submitted is shown in the following table, the corresponding figures for the last two years being given for comparison.

AVERAGE COMPOSITION OF MILK

	1960	1959	1958	Minimum legal requirement
Number of Samples ..	2,873	2,512	3,106	
Solids-not-fat ..	8.73%	8.72%	8.76%	8.50%
Fat .. .. .	3.75%	3.70%	3.73%	3.00%
Total solids ..	12.48%	12.42%	12.49%	11.50%

The adulteration rate of 1.8 per cent. was unchanged for the third successive year.

Of the 51 unsatisfactory samples 16 contained added water, 27 were fat deficient, 7 showed both added water and fat deficiency, and one, whilst chemically satisfactory, was contained in a dirty bottle. The highest amount of added water was 14 per cent. and the greatest fat deficiency 53 per cent.

Prosecutions were successfully instituted against two farmers in respect of the worst series of watered milks.

A further 337 milks (330 in 1959) had solids-not-fat of less than 8.5 per cent. and therefore added water was suspected, but in each case the freezing point showed the deficiency to be due to natural causes (that is cows giving poor quality milk), and not to added water.

In recent years the proportion of such naturally poor milks has risen steadily, both in Leeds and other parts of the country. The main contributory factor would seem to be the increasing number of Friesian cattle, which give milk of lower compositional quality than the other main dairy breeds. During the year under review there was published the Report of an Interdepartmental Committee on "Milk Composition in the United Kingdom". The Committee recommended that steps should be taken to arrest (and eventually reverse) the fall in the composition of milk, principally by means of (1) a differential payments scheme under which producers would be paid a lower price for sub-standard milk, and (2) by replacing the present presumptive minimum standards by fixed legal standards. At present it is no offence to sell milk containing less than the presumptive limit of 8.5 per cent. solids-not-fat provided the seller can prove that the milk is in the state in which it came from the cow. Under an absolute standard it would be illegal to sell milk containing less than 8.5 per cent. solids-not-fat. Acceptance of the Committee's recommendations would undoubtedly bring about an improvement in the quality of the milk supply, although it would be some years before the effect became apparent.

Of the 83 samples of Channel Island Milk included in the above total only one failed to reach the required 4 per cent. fat content.

#### **FOODS OTHER THAN MILK:—**

The number of such samples increased for the fourth successive year totalling 679 compared with 135 in 1956. Of these 52 (7.7 per cent.) were unsatisfactory.

Details of the more interesting cases of adulteration together with comments upon a few of the genuine samples will be found in the following paragraphs.



**Sausages.**—Of 38 samples received during the year 4 were reported against for having meat contents below the recognised standards of 50 per cent. for beef and 65 per cent. for pork.

Proceedings were successfully instituted against two butchers whose beef sausage contained only 35 and 40 per cent. meat respectively.

The average meat content was 59·8 per cent. for beef sausages (25 samples), and 65·3 per cent. for pork (11 samples).

One beef sausage, whilst possessing a satisfactory meat content, contravened the Preservative Regulations, in that it contained sulphur dioxide preservative without declaration of its presence.

**Meat Pies.**—At the request of the Ministry of Food a special review of the composition of meat pies was carried out during the first six months of the year, the result being reported to the Ministry for the information of the Food Standards Committee. A total of 102 pies were analysed, the average meat content of all samples being 28·1 per cent. (minimum 16·0 per cent., maximum 47·5 per cent.). A requirement of not less than 25 per cent. meat is considered reasonable, but 38 of the pies would have failed such a standard; 8 pies containing less than 20 per cent. meat were classified as unsatisfactory.

Several broad conclusions could be drawn from the survey:—

- (1) Larger pies generally contained a greater percentage of meat than smaller pies.
- (2) A wide variation existed in pies of the same size and price (e.g. the popular 7d. pork pie had meat contents varying from 16 per cent. to 34 per cent.).
- (3) Pies described as "Steak Pie" or "Steak & Kidney Pie" generally contained more (and leaner) meat than pork pies. Average figures were as follows:—

		Fat	Lean	Total Meat
Pork Pies	(80)	6·3%	20·8%	27·1%
Steak Pies	(22)	2·5%	29·7%	32·2%

**Minced Chicken in Jelly.**—Both an informal sample and a subsequent formal sample of the same brand contained only 65 per cent. of chicken as compared with the accepted Code of Practice of not less than 70 per cent.

The manufacturers at first disputed the analysis but finally admitted that a mistake had been made and amended their recipe accordingly. Subsequent samples proved satisfactory.

**Potted Salmon.**—An informal sample contained only 65 per cent. and a subsequent formal sample 70 per cent. of salmon, the remainder being moist cereal filler. A product described as potted salmon should be free from cereal filler. These samples consisted, in fact, not of potted salmon but of salmon paste.

**Salmon Cutlets** contained only 35 per cent. of salmon and were, therefore, in no way superior to Salmon Fish Cakes. The name cutlet implies a superior article to a fish-cake, and three other fish cutlets analysed during the quarter contained over 80 per cent. of fish.

**Shrimp Slices** imported from Hong Kong were made from tapioca with not more than 8 per cent. shrimp. In addition to possessing a misleading name the packet failed to specify the ingredients as required by the Labelling of Food Order.

**Buttered Teacakes.**—Both samples received were unsatisfactory, one being spread with 100 per cent. margarine, and the other with margarine containing 10 per cent. butter. In subsequent Court proceedings a fine of £5 plus 50/- analyst's fees was imposed in each case.

**Creamed Rice Milk Pudding** was stated on the label to have been made from full-cream milk, rice and sugar, but contained 25 per cent. added water.

An **Iced Lolly** contained an excessive quantity of copper (22 parts per million) compared with the usual figure of under 2 parts per million.

**Flour.**—Of 18 samples submitted one contained a small quantity of “webbing” (insect excreta) together with a large number of dead flour mites. It was also 17 per cent. deficient in Creta Praeparata, and another sample contained a 12·8 per cent. excess of this nutrient, compared with the amount required under the Flour (Composition) Regulations, 1956.

**Cognac** labelled 70° Proof contained only 65 per cent. proof spirit.

**Prohibited Colouring Matter** was present in 5 samples. In the case of a sample of Tomato Ketchup it appeared that the prohibited colour had been introduced as an impurity with a permitted colour (Orange RN). Three samples of *Sweets* (from one manufacturer) and a sample of *Instant Icing* contained the prohibited colour Brilliant Blue F.C.F. This coal-tar dye is classified by The Food Standards Committee as one of the “Colours which have been shown or are suspected, to have harmful effects on health”.

Legal proceedings were instituted against the packers of the sweets who pleaded guilty. They were granted an absolute discharge on payment of 69/- costs.

**Spearmint Gum** alleged to have caused vomiting in a child, possessed an unpleasant, bitter flavour. Analysis showed the essential oil to have become markedly rancid. The conclusion that the gum had deteriorated as a result of overlong storage was confirmed by subsequent enquiries.

**Nerve Food.**—This informal sample contained over 90 per cent. of skimmed milk powder together with small quantities of wheat and barley flours and other minor ingredients. The Nerve Food was described on the label as “Extremely valuable in building up and in all cases of malnutrition”. In my opinion, such a claim requires the presence of adequate quantities of all the vitamins essential for human nutrition, whereas analysis showed only insignificant traces of Vitamins A, B<sub>1</sub>, and C. The label was therefore, reported to be misleading as to the nutritional value of the food, this constituting an offence against Section 6 of the Food & Drugs Act. The Nerve Food was sold at 3/3d. for an 8-oz. tin. The cost of the ingredients was approximately 6d.

**Cider Vinegar** was another article whose label misled as to its nutritional value claiming (a) to produce slimming and (b) to promote vigour. Analysis failed to substantiate either claim.

**Contaminated Foods** (mostly comprising complaint samples submitted by members of the public) included five samples of *Bread* (three contaminated with machinery grease and two showing mould growth); *Gooseberry & Apple Pie* which had developed mould; a bottle of *British Wine* containing six flies; a *Fish Cake* in which were two slugs; *Oatmeal* containing a rodent dropping, and three bottles of *Mineral Water* contaminated with disinfectant, paraffin and hydrogen sulphide gas, respectively.

### DRUGS

6 of the 75 samples examined proved unsatisfactory. **Mouth Ulcer Tablets** were 10 per cent. deficient in ascorbic acid, **Cough Mixture** 75 per cent. deficient in chloroform, and a **Vitamin Lozenge** 25 per cent. deficient in Vitamin A. **Headache and Neuralgia Powders** contained 7.5 grains of acetylsalicylic acid per powder compared with the 5.0 grains stated to be present.

**Slimming Bath Salts.**—Two samples (of the same brand) were classified as unsatisfactory on the grounds that the name “ Slimming Bath Salts ” followed by the words “ Possess valuable slimming properties ”, constituted a false description, in that the use of these salts would not produce a slimming effect. Even more fantastic claims were made in a leaflet enclosed with the salts, e.g. “ an inch off the waist or two off the hips is comfortably accomplished in .....Slimming Baths”. The salts sold at 4/3d. and consisted of about five pennyworth of a mixture of washing soda and sodium bicarbonate. On being informed of the Department's views the manufacturers agreed to amend the labels so as to remove every reference to slimming.

### BACTERIOLOGICAL SAMPLES

752 Milks and 48 Ice-Creams were submitted to the required tests, the results being shown in the tables below. The Methylene Blue Test measures the keeping quality of the milk, and the

Phosphatase Test the efficiency of pasteurisation. The Turbidity Test, which is only carried out on Sterilised Milk, shows whether or not such milk has been sufficiently heated.

## MILK

Designation	Number examined	Unsatisfactory by			Percentage reported as unsatisfactory
		Methylene Blue test	Phosphatase test	Turbidity test	
T.T. Raw ..	278	4	..	..	1.4
Sterilised ..	97	..	..	..	Nil
Pasteurised :—					
Dairies ..	98	..	..	..	Nil
Schools ..	85	..	..	..	Nil
T.T. Pasteurised :—					
Dairies ..	194	..	2	..	1.0
Total ..	752	4	2	..	0.8

## ICE-CREAM

Grade	Time taken to reduce Methylene Blue at 37°C	Number	Percentage	Quality
1.	4½ hours or more ..	21	43.7	Good
2.	3½ to 4 hours .. ..	8	16.7	Satisfactory
3.	½ to 2 hours .. ..	11	22.9	Unsatisfactory
4.	Nil .. ..	8	16.7	Very unsatisfactory
		48	100.0	

It will be seen that 19 of the 48 samples of ice-cream (39.6 per cent.) were bacteriologically unsatisfactory.



It must be regretfully recorded that the unsatisfactory sample were the products of local manufacturers; the nationally distributed brands were almost invariably of Grade 1 quality.

### FERTILISERS AND FEEDING STUFFS

12 Fertilisers were submitted of which two proved unsatisfactory. A *Lawn Dressing* was deficient in soluble phosphoric acid and contained an equivalent excess of insoluble phosphoric acid due to reversion. *Compound Liquid Fertiliser* was deficient in nitrogen, magnesium and manganese and contained an excess of potash, compared with the composition claimed in the Statutory Statement.

### ATMOSPHERIC POLLUTION

The measurement of atmospheric pollution in the city, using deposit gauges and lead peroxide candles, has continued at the same eight stations as in previous years. The additional temporary gauge at Sayner Lane (a site where there have been complaints of particularly bad pollution) was also continued. The results are shown in the table below:—

STATION	DEPOSIT GAUGES		LEAD PEROXIDE CANDLES	
	Average monthly deposit in tons per sq. mile		Average daily sulphur pollution as mgrms. of SO <sub>3</sub> per 100 sq. cms. of exposed surface	
	1960	1959	1960	1959
Armley Park .. ..	22.4	19.8	2.3	2.5
Burley Park .. ..	26.2	21.8	2.3	2.4
Headingley .. ..	12.5	11.2	2.1	2.4
Hunslet .. ..	23.7	31.8	2.8	3.5
Market Buildings ..	21.6	20.3	3.7	3.9
Roundhay .. ..	10.7	10.2	1.5	1.6
St. James's Hospital ..	19.1	17.2	2.5	2.9
Temple Newsam .. ..	12.1	12.0	2.5	2.7
Sayner Lane (Temporary)	67.2	47.5	..	..
Average of all permanent sites .. ..	18.5	18.0	2.5	2.7

The daily measurements of Smoke and Sulphur Dioxide in the atmosphere have also continued using the apparatus installed in the laboratory and at the four sites within the proposed Central Smoke Control Area. The results are summarised in the following table:—

STATION	SMOKE		SULPHUR DIOXIDE	
	Milligrams per 100 cubic metres		Parts per 100 million	
	Daily Average		Daily Average	
	1960	1959	1960	1959
Blenheim ..	30	34	7.5	10.9
Hyde Terrace ..	27	34	10.6	13.1
Market Buildings ..	31	34	15.0	13.9
Park Square ..	27	32	13.0	14.2
Y.W.C.A. ..	25	35	17.1	19.8

### RADIOACTIVITY

Routine monitoring of the city water was continued. A sample was taken each week and the analysis carried out on composite monthly samples. The virtual cessation of nuclear weapon testing since 1958 has been reflected in a steady fall in the radioactivity of the water; by the end of the year the level of activity was only a tenth of that recorded in May, 1959 when monitoring was commenced.

### MISCELLANEOUS SAMPLES SUBMITTED BY THE PUBLIC HEALTH DEPARTMENT

Two samples of Canned Minced Chicken in Jelly were submitted by a manufacturer who had amended his recipe following an adverse report from this Department. The new recipe gave a satisfactory chicken content. Slices of Canned Boiled Ham were submitted for the identification of numerous small white spots embedded in the meat. They proved to consist of crystals of sodium phosphate. This harmless chemical is increasingly added to canned meat products to prevent shrinkage of the meat during processing of the cans.

A fragment of bone found in some dripping was submitted with a suggestion that it was part of a human tooth. The specimen appeared much more like part of a pig's tooth, and its identity was later confirmed at the Dental School as a fragment of a pig's premolar.

A sample of bore hole water was free from organic impurities, but had taken up an excessive amount of zinc (11 parts per million) from the galvanised storage tank into which it had been pumped.

Eight waters from flooded cellars were analysed in order to determine their origin.

Twelve samples of air were analysed to determine the efficiency of ventilation in a number of "improved" back-to-back houses. Eight samples of air from the vicinity of a chemical works were analysed for determination of nitrous fumes.

Fourteen atmospheric deposits from the area of the proposed new abattoir were examined.

### **SAMPLES SUBMITTED BY OTHER CORPORATION DEPARTMENTS**

**Central Purchasing Department.**—Six liquid detergents and two toilet soaps were analysed.

**City Architect's Department.**—Two samples of mortar were analysed. Both contained an excessive proportion of sand, and failed by a considerable margin to comply with the contract specification. A ground water was analysed with special reference to its sulphate content.

**City Coroner.**—61 specimens were analysed in respect of 21 deaths. The possibility of poisoning as the cause of death was excluded in two cases where no drugs whatsoever were present, and in four others in which therapeutic doses only could be detected in the organs. In nine cases death was shown to be due to overdoses of barbiturates, the actual drugs concerned being Amytal (4 cases), Tuinal (2 cases), Carbrital, Nembutal and Seconal. Two deaths were

due to aspirin poisoning, and in another instance the deceased had drunk the toxic chemical Toluene and then gassed himself.

The final three cases involved determinations of blood-alcohol and estimations of the quantity of intoxicating liquor consumed by persons killed in road accidents. In the worst of these cases, the results indicated that the car driver had consumed the equivalent of at least 8 pints of beer prior to the accident which caused his death.

**City Engineers' Department.**—A deposit from a building site was analysed and found to consist of spent lime from a gas-works.

**Transport Department.**—The regular examination of fuel oil used in the Corporation 'buses was continued, 85 samples being analysed during the year.

**Waterworks Department.**—The customary independent analysis of the city's water was carried out each month, all samples proving satisfactory.

### SAMPLES RECEIVED FROM OTHER SOURCES

**Private Samples.**—The 103 samples received under this heading involved the usual wide variety of investigations. 68 samples of foodstuffs (comprising milk, cream, ice-cream, bread, orange drink, and haddock grillettes) were analysed for local firms, as also were three fertilisers. A baker concerned at a green discolouration appearing on the outside of some of his individual fruit pies submitted one such pie, together with three baking tins. The colour was shown to be due to an iron compound dissolved from the baking tin, as a result of parts of the tinned surface of the latter having worn away and exposed the iron below. Two bones taken from a leg of "chicken" served in a restaurant were submitted by the customer concerned who doubted the accuracy of the description "chicken". The bones were passed to the Department of Zoology at Leeds University, where the opinion was expressed that they were from a distinctly "old bird".

Other privately submitted samples consisted of eleven waters, six chemical solutions (for standardisation and subsequent use in examinations), samples of corroded stained glass from a church window, meat for the presence of poisons, wheat germ oil, skin cream, reducing cream, slimming salts, a fragment of rock for identification (Quartz), soil from a building site for sulphate determination, a cylinder of compressed air for use by underwater swimmers, and the contents of a bottle which had produced severe burning of the mouth and throat of a child who had tasted it, and which proved to contain strong sulphuric acid.

**Craven District Coroner.**—Five samples were analysed in connection with three deaths; one proved to be due to an overdose of Amytal and another an overdose of Soneryl. In the third case a determination of blood alcohol was required.

**Leeds General Infirmary.**—Two specimens of blood and one stomach washings were submitted for analysis. A tube of powder and two samples of unknown pills were identified.

**Leeds Group "B" Hospital Management Committee.**—Two samples of orange squash, one of beef sausages, one margarine and two toilet soaps were analysed.

**Rothwell Urban District Council.**—15 samples of water and 6 of sewage were analysed.

**Wakefield Corporation.**—191 Food and Drug samples, 10 Fertilisers, 2 Feeding Stuffs, 72 Atmospheric Pollution samples, 16 Waters, and 2 Paints were analysed.



FOOD AND DRUGS ACT, 1955.  
 SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1960.

Article	Number examined	Number unsatis- factory
FOODS		
Almonds, ground .. .. .	6	..
Baby Foods .. .. .	4	..
Bacon .. .. .	1	..
Baking powder .. .. .	3	..
Beef and Ham Cutlets .. .. .	1	..
Beer .. .. .	19	..
Beverages, powdered .. .. .	2	..
Biscuits .. .. .	1	..
Bread .. .. .	6	5
Breakfast Cereal .. .. .	1	..
Butter .. .. .	12	..
Buttered teacakes .. .. .	2	2
Cakes .. .. .	10	..
Cake decorations .. .. .	12	..
Cake and pudding mixtures .. .. .	11	..
Cheese and cheese spread .. .. .	9	..
Cherries, glacé .. .. .	1	..
Chicken and Chicken preparations (Canned and bottled) .. .. .	14	3
Chocolate .. .. .	13	..
Coconut, tinted .. .. .	1	..
Coffee and coffee extracts .. .. .	12	..
Custard and blancmange powders .. .. .	13	..
Crab meat, paste and spread .. .. .	5	..
Cream (fresh and canned) .. .. .	11	..
Curds .. .. .	1	..
Curry powder .. .. .	2	..
Dehydrated foods .. .. .	4	..
Eggs and dried egg .. .. .	2	..
Fish cakes and fish fingers .. .. .	9	1
Fish paste and potted fish .. .. .	13	2
Carried forward .. .. .	201	13

## FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1960—*continued*

Article	Number examined	Number unsatis- factory
Brought forward .. ..	201	13
Flavouring .. ..	7	..
Flour .. ..	18	2
Food colours .. ..	3	..
Fruit, canned .. ..	2	..
Fruit, dried .. ..	1	..
Fruit juices .. ..	4	..
Fruit pie .. ..	1	1
Gelatine .. ..	2	..
Ginger, ground .. ..	1	..
Glucose .. ..	3	..
Gravy salts .. ..	3	..
Honey .. ..	1	..
Ice-cream .. ..	7	..
Iced Lollies .. ..	2	1
Iced Lolly Syrup .. ..	1	..
Icing Mix .. ..	3	1
Jellies .. ..	8	..
Lard, cooking fats and oils .. ..	7	..
Margarine .. ..	11	..
Marzipan .. ..	5	..
Meat paste and spread .. ..	6	..
Meat Pies.. ..	105	8
Meat products (Canned):		
Beef Steak with Gravy .. ..	1	1
Boiled Ham.. ..	1	..
Pork Brawn.. ..	1	..
Pork Luncheon Meat .. ..	3	..
Meringue Powders .. ..	1	..
Milk .. ..	2,790	50
Milk, Channel Island .. ..	83	1
Milk, condensed (Canned) .. ..	2	..
Carried forward .. ..	3,284	78

FOOD AND DRUGS ACT, 1955  
 SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1960—*continued*

Article	Number examined	Number unsatis- factory
Brought forward .. ..	3,284	78
Milk Puddings (Canned) .. ..	5	I
Milk Shake Cordial .. ..	2	..
Milk, skimmed with vegetable fat (Canned) .. ..	I	..
Mint in vinegar .. ..	I	..
Mock Caviar .. ..	I	..
Mussels (Bottled) .. ..	I	..
Mustard .. ..	2	..
Nerve Food .. ..	I	I
Nut Mix .. ..	I	..
Oatmeal .. ..	2	I
Parsley and Thyme Force meat ..	I	..
Pastry mix .. ..	I	..
Peas dried and canned .. ..	2	..
Peel, cut .. ..	3	..
Pepper .. ..	5	..
Pepper flavoured compound .. ..	I	..
Pickles and Sauces .. ..	17	I
Preserves .. ..	26	..
Preserving Tablets .. ..	I	..
Pudding, ready made .. ..	2	..
Quail eggs (Canned) .. ..	I	..
Rice, ground .. ..	I	..
Saccharin Tablets .. ..	I	..
Sage and Onion Stuffing .. ..	I	..
Salad Cream .. ..	I	..
Salmon, (Canned) .. ..	4	..
Salmon cutlets .. ..	I	I
Sausages .. ..	38	5
Semolina .. ..	I	..
Shrimps, potted .. ..	I	..
Carried forward .. ..	3,410	88

FOOD AND DRUGS ACT, 1955.  
 SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1960.—*continued*

Article	Number examined	Number unsatis- factory
Brought forward .. ..	3,410	88
Shrimp slices .. ..	1	1
Shortbread .. ..	1	..
Slimming breads and diets .. ..	4	..
Slimvin .. ..	1	1
Soft drinks .. ..	34	5
Soup, canned and powdered .. ..	6	2
Spirits .. ..	4	1
Suet, beef .. ..	6	..
Sweets .. ..	48	4
Tea .. ..	3	..
Tonic Wines .. ..	2	..
Trifle Pack .. ..	1	..
Vinegar .. ..	8	..
Watercress .. ..	1	..
Wines .. ..	20	1
Yeast, dried .. ..	1	..
Yoghourt .. ..	1	..
DRUGS (75)		
Acne Cream .. ..	1	..
Antiseptic Lozenges and Tablets .. ..	3	1
Blood Purifier Tablets .. ..	1	..
Cough Mixtures, lozenges, pastilles and tablets .. ..	25	1
Corn Solvent .. ..	1	..
Earex .. ..	1	..
Foot powder and cream .. ..	3	..
Gripe Water .. ..	1	..
Haemorrhoid Cream .. ..	1	..
Headache and Neuralgia Powders .. ..	1	1
Carried forward .. ..	3,590	106

FOOD AND DRUGS ACT, 1955.  
 SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1960—*continued*

Article	Number examined	Number unsatis- factory
Brought forward .. ..	3,590	106
Indigestion Tablets .. ..	3	..
Indian Brandee .. ..	3	..
Inhalant Capsules .. ..	1	..
Laxative preparations .. ..	1	..
Liver and stomach mixture .. ..	1	..
Malt and Cod Liver Oil .. ..	2	..
Massage Cream .. ..	1	..
Medicated Skin Cream .. ..	2	..
Pain killing Tablets .. ..	1	..
Quinine, tincture of .. ..	1	..
Rose Hip Syrup .. ..	2	..
Slimming Bath Salts .. ..	2	2
Slimming Tablets .. ..	1	..
Tonic Preparations .. ..	4	..
Tranquillisers .. ..	1	..
Vitamin and Mineral preparations .. ..	9	1
Yeast Tablets .. ..	2	..
<b>TOTAL FOOD AND DRUGS ..</b>	<b>3,627</b>	<b>109</b>



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